The Economist

Nikki Haley challenges Trump

War, handouts and the green transition

Israel's Supreme mistake

Russian culture in the time of Z

FEBRUARY 18TH–24TH 2023

WHY INFLATION WILL BE HARD TO BRING DOWN

VISIT…

LANZAROTE
Caliente.com

LOUIS
VUITTON
LA FABRIQUE
DU TEMPS
Au 750
SWISS MADE
ADJUSTED TO SIX POSITIONS
CALIBRE LV525
FIFTY (50) JEWELS
SWISS MADE
0 10 20 30

LOUIS VUITTON

HIGH WATCHMAKING

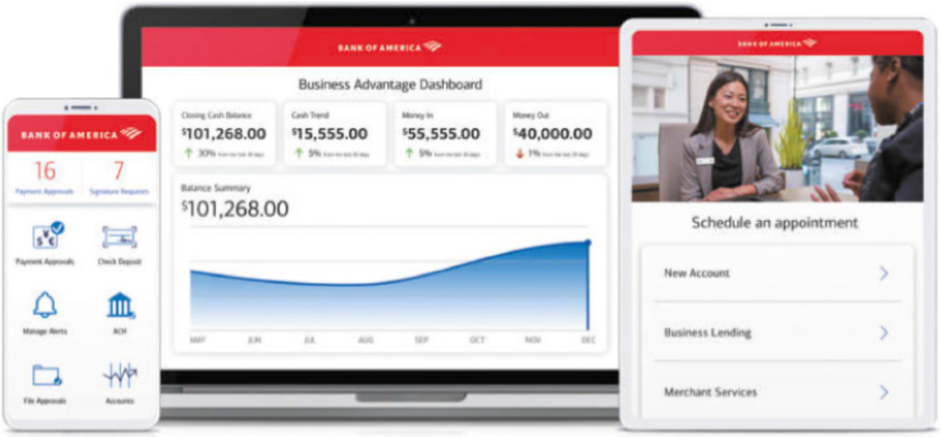
Tambour Carpe Diem Automata

Hand-wound mechanical movement manufactured by La Fabrique du Temps Louis Vuitton in Geneva.
Time display and dial animations on demand.

GPHG
GRAND PRIX D'HORLOGERIE DE GENÈVE
2021
Audacity Prize

Reviewing the forecasting insights before ordering more inventory.
Realizing he's afraid of heights.
Booking time with a banker after going over the books.
Tracking same-day payments while stocking the shelves.

Business solutions so powerful, you'll make every move matter.


BANK OF AMERICA
Business Advantage Dashboard
$101,268.00
$15,555.00
$55,555.00
$40,000.00
Balance Summary
$101,268.00
16
7
Payment Approvals
Check Deposit
Manage Alerts
ACH
File Approvals
Accounts
Schedule an appointment
New Account
Business Lending
Merchant Services

BANK OF AMERICA

What would you like the power to do?®

Learn more at bankofamerica.com/bankingforbusiness

You must be enrolled in Business Advantage 360, our small business online banking, or Mobile Banking to use Cash Flow Monitor and Connected Apps, and have an eligible Bank of America® small business deposit account. Mobile Banking requires that you download the Mobile Banking app and is only available for select mobile devices. Message and data rates may apply.

Screen images simulated. Sequences shortened.

©2023 Bank of America Corporation. All rights reserved. | MAP5423867

Contents

On the cover

Inflation will be harder to bring down than markets think: leader, *page 9*. Investors believe the danger is over. Not so fast: briefing, *page 15*. Their bet on a soft landing is not the good news it seems: Buttonwood, *page 68*

Nikki Haley challenges Trump A long-shot candidacy complicates Republicans' chances of finding a new leader, *page 18*

War, handouts and the green transition To decarbonise faster, let renewables firms make money: leader, *page 11*. How the green transition is being turbocharged, *page 64*. European business and the green-subsidy race, *page 58*

Israel's Supreme mistake Binyamin Netanyahu's legal reforms are a dreadful answer to a real problem: leader, *page 10*. And they are dividing the country, *page 43*

Russian culture in the time of Z Repression can stifle the arts. Creating something new is harder, *page 75*. Paris's long fascination with Moscow: Charlemagne, *page 50*

→ *The digital element of your subscription means that you can search our archive, read all of our daily journalism and listen to audio versions of our stories. Visit* ***economist.com***

The world this week

7 A summary of political and business news

Leaders

9 **The world economy** Still aloft
10 **Peak populism** A sign from Scotland
10 **Israel's constitution** Supreme mistake
11 **Green energy** Plug and pay
12 **Nigeria** A chance for change

Letters

14 On China and space, Turkey, Paul Pennyfeather, Pakistan, banking, old age

Briefing

15 **Taming inflation** A hard road

Schumpeter Ukraine is a testing ground for America's AI-wielding defence-tech industry, *page 61*

United States

18 Nikki Haley's campaign
19 Youth curfews
20 Renters' rights
20 The Supreme Court and the algorithm
21 Debating with prisoners
24 Balloons and UFOs
24 Drag shows under attack

FOR PRESIDENT

The Americas

26 Stoking inflation
27 Nicaragua's purge
28 In bad nick

Asia

29 South Asia's filthy air
32 The Taliban's new canal
32 Aboriginal booze bans
34 **Banyan** Modi mauls the media

China

36 How China ensnares alleged criminals abroad
37 Overseas police stations
38 Effective propaganda
39 **Chaguan** Losing hearts and minds in Taiwan

Middle East & Africa

40 Nigeria's crucial election
43 Israel's legal convulsions
44 Syria after the earthquakes

⏩ Contents continues overleaf

Europe

45 Southern Europe's fertility crisis
47 Building bad in Turkey
48 Edgy Moldova
48 The rule of law in Poland
49 Trouble at the San Remo song festival
50 **Charlemagne** France's Russia fixation

Britain

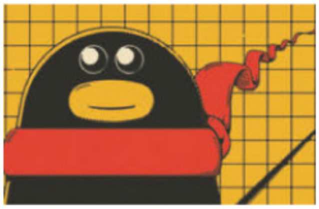
51 Nicola Sturgeon quits
52 Asylum hotels
53 **Bagehot** The EU law bill

International

54 How the young have soured on driving

Business

56 China's digital economy
58 The green-subsidy race
58 Adani tumbles on
59 A K-pop takeover
59 Disney bobs up and down
60 **Bartleby** Coffee meetings
61 **Schumpeter** Tech and the Pentagon



Finance & economics

64 War and the green transition
66 Superabundant cobalt
67 Crypto scrutiny
67 Chinese capital flight
68 **Buttonwood** Soft-landing mistakes by investors
69 Malpass resigns
69 America's brain gain
70 **Free exchange** The case for globalisation optimism

Science & technology

71 Making green steel
72 A contraceptive for men?
73 Stabilising MRNA vaccines
74 Black holes, dark energy
74 L-DOPA protects plants

Culture

75 Russian culture in wartime
76 **Home Entertainment** A choral star
77 Psychological fiction
77 Capitalist propaganda
78 Femicide in Mexico
79 **Johnson** Stigma and euphemism

Economic & financial indicators

80 Statistics on 42 economies

Graphic detail

81 Who was worst-hit in Turkey's earthquake?

Obituary

82 Maya Widmaier-Picasso, daughter and muse

The Economist

Volume 446 Number 9334

Published since September 1843
to take part in *"a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."*

Editorial offices in London and also:
Amsterdam, Beijing, Berlin, Brussels, Chicago, Dakar, Dallas, Dubai, Johannesburg, Madrid, Mexico City, Moscow, Mumbai, New Delhi, New York, Paris, San Francisco, São Paulo, Seoul, Shanghai, Singapore, Tokyo, Washington DC

Subscription service
For our full range of subscription offers, including digital only or print and digital bundled, visit:
Economist.com/offers

If you are experiencing problems when trying to subscribe, please visit our Help pages at:
www.economist.com/help
for troubleshooting advice.

To manage your account online, please visit my.economist.com where you can also access our live chat service which is available 24/7. To call us, contact our dedicated service centre on:

North America: +1 888 815 0215
Latin America & Mexico: +1 646 248 5983

Please recycle

PEFC
PEFC/29-31-58

PEFC certified
This copy of *The Economist* is printed on paper sourced from sustainably managed forests certified by PEFC
www.pefc.org

© 2023 The Economist Newspaper Limited. All rights reserved. Neither this publication nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of The Economist Newspaper Limited.

The Economist (ISSN 0013-0613) is published weekly except combined issues in July and December, by The Economist Newspaper Limited, 750 3rd Avenue, 5th Floor, New York, N Y 10017. *The Economist* is a registered trademark of The Economist Newspaper Limited. Periodicals postage paid at New York, NY and additional mailing offices. Postmaster: Send address changes to *The Economist*, PO Box 920 Getzville, New York 14068, USA. Canada Post publications mail (Canadian distribution) sales agreement no. 40012331. Printed by Quad/Graphics, Saratoga Springs, NY 12866

The world this week Politics

Scotland's first minister, Nicola Sturgeon, unexpectedly announced she would resign, after more than eight years in office. Ms Sturgeon has campaigned tirelessly for Scottish independence, a cause that Scots rejected in a referendum in 2014. Her efforts to ask voters the same question again, hoping for a different answer, have been rebuffed by the courts. She had been pilloried over the state of Scotland's public services, and rowed with some of her own Scottish Nationalists over transgender issues. She will stay in office until a successor is found.

The death toll from the **earthquakes** that hit southern Turkey and northern Syria passed 42,000. Survivors were still being pulled from the wreckage, a week after the tremors, but hope is dim for those still trapped. Critics lambasted Recep Tayyip Erdogan, Turkey's president, for policies that allowed construction firms to avoid safety measures that would have made more buildings earthquake-proof. He faces re-election this year.

America temporarily eased sanctions on **Syria** to allow earthquake aid into the country. New border crossings were opened to expedite the transfer of supplies. Egypt, Jordan and the United Arab Emirates have been leading the relief effort.

The president of **Moldova**, Maia Sandu, said that Russia was trying to overthrow her pro-EU government by infiltrating the country and stirring up protests. Ukraine's president, Volodymyr Zelensky, says that Ukraine has uncovered a Russian plot to destabilise Moldova. The embattled Moldovan prime minister stepped down and was replaced by Dorin Recean, who was the president's security adviser and is also pro-Western. Moldova applied to join the EU last year.

Another journalist in **Russia** was sentenced to prison under "fake news" laws for reporting on Russia's bombing of Mariupol in Ukraine last March. Maria Ponomarenko was sent to a penal colony for six years for social-media posts describing an air strike on a theatre full of children.

The **Brothers of Italy,** the senior party in the Italian governing coalition, handily won regional elections in Lazio and Lombardy, strengthening the hand of the prime minister, Giorgia Meloni. The right-wing coalition's victory in Lazio, around Rome, turfed out the centre-left, which had held power there for a decade.

Up, up and away

A week after shooting down a Chinese spy balloon, America downed several **unidentified objects** flying over North America. It did not specify what the objects were. **China** accused America of having flown balloons into its airspace more than ten times during the past year.

The hunger crisis in **North Korea** has worsened, according to the South Korean government. Even the army's food rations have been cut, for the first time in two decades. North Korea, a communist dictatorship, has long mismanaged its food supply. In the 1990s a famine killed at least 200,000 and perhaps as many as 3m people.

Tax officials in **India** raided the BBC's offices in Delhi and Mumbai, weeks after the broadcaster released a documentary blaming Narendra Modi, the prime minister, for failing to prevent massacres of Muslims while he was in charge of the state of Gujarat. The documentary was banned in India. Critics of the ruling Hindu nationalist party have often run into trouble with the tax man.

New Zealand declared a state of emergency as Cyclone Gabrielle battered the country's north, causing widespread flooding and landslides. It was also hit by an earthquake of magnitude 6.1.

Huge protests continued in **Israel** against proposed reforms put forward by Binyamin Netanyahu, the prime minister, that would curtail the power of the Supreme Court to overturn laws passed by the Knesset. Isaac Herzog, Israel's president, said many people see the reform as a "threat to Israeli democracy" and warned of a "societal and constitutional collapse". Meanwhile the government passed a law to strip Israeli Arabs convicted of terrorism of their citizenship.

Police in **Tunisia** arrested more prominent critics of the president, Kais Saied, including a senior official in the main opposition party, Ennahda, which styles itself "Muslim democratic". Police have also arrested a former finance minister, judges and a diplomat in the crackdown.

A Russian frigate, the *Admiral Gorshkov*, docked in Cape Town ahead of joint military drills with **South Africa** and China. The ship, displaying the Z insignia of Russian troops in Ukraine, carries a Zircon hypersonic missile that Russia intends to test in the exercise. The mayor of Cape Town, who comes from the opposition Democratic Alliance, said the vessel was not welcome. Last month Russia's foreign minister, Sergei Lavrov, visited South Africa. The government says it is neutral between Ukraine and Russia.

Jair Bolsonaro, the former president of **Brazil**, said he would return to the country in March to lead a "right-wing movement". Mr Bolsonaro, who has been living in Florida since December, has not yet conceded defeat after Luiz Inácio Lula da Silva, a leftist, beat him in an election in October. Mr Bolsonaro reiterated baseless insinuations that the election was "biased" against him.

Nikki Haley announced that she would run to be the Republican candidate for the American presidency in 2024. The former governor of South Carolina is the first person to challenge Donald Trump, who has said he will run again. Ron DeSantis, the Republican Mr Trump fears most, has yet to throw his hat into the ring.

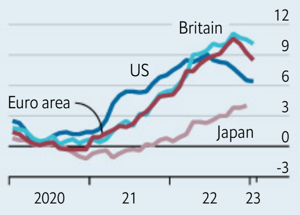
Joe Biden appointed **Lael Brainard** to head his National Economic Council, which co-ordinates economic policy. Ms Brainard is currently vice-chairwoman of the Federal Reserve. She once argued that the central bank should expand its remit to encompass climate change. Renewable energy is central to the huge infrastructure plans announced by Mr Biden.

An institution

Dianne Feinstein decided not to seek another term in the United States Senate. The 89-year-old was first elected to her California seat in 1992 and is the longest-serving female senator ever. She became mayor of San Francisco in 1978, after the assassination of her predecessor, George Moscone. She has pressed for strict gun controls, helping to pass an assault-weapons ban in 1994. Adam Schiff and Katie Porter are among the Democratic bigwigs vying to replace her.

Consumer prices

% change on a year earlier



Source: Haver Analytics

America's annual **inflation** rate dipped to 6.4% in January, from 6.5% in December. Markets had expected a sharper fall. Food prices were up by 10.1% year on year, and energy prices by 8.7%, which all point to further interest-rate rises from the Federal Reserve. In Britain inflation stood at 10.1% in January, down from 10.5% but still stubbornly high. Inflation has not been falling as fast there as in America and the EU, though the Bank of England thinks this will change when lower wholesale energy prices start feeding through to consumers.

The Japanese government nominated Ueda Kazuo to be the next governor of the **Bank of Japan**. Speculation had swirled for months about who would replace Kuroda Haruhiko, who steps down in April, but Mr Ueda was a surprise choice. He is a respected academic economist; his appointment breaks the tradition of selecting someone from within the central bank or finance ministry. Markets will be watching closely for any sign that Mr Ueda intends to adjust the BOJ's ultra-loose policy.

The delicate balancing act facing Mr Ueda was highlighted by the latest **GDP figures for Japan**. The economy grew by 0.6% at an annualised rate in the final quarter of 2022, avoiding recession but a slower rate than had been expected after the easing of covid-19 restrictions. GDP expanded by 1.1% for the whole year.

Air India said it would buy 470 planes from Airbus and Boeing to revamp its fleet, the biggest-ever order from a single airline. The carrier was privatised by the government after 70 years of state ownership, returning to the Tata Group, whose founder started the airline in 1932. The order includes wide-bodied, long-distance jets, which will enable Air India to compete with Gulf airlines for Indian long-haul passengers and fly directly to America and Europe.

A happy ending?

Nelson Peltz ended his brief campaign to secure a seat on **Disney's** board and force it to change. The activist investor terminated his proxy battle after the company announced a restructuring of its business, which includes placing Disney+, its main streaming channel, in a new entertainment division overseeing all content decisions. Mr Peltz's firm said the new strategy was "a win" for shareholders.

After months of rumours, **Ford** confirmed that it is cutting its workforce in Europe. The carmaker said that 3,800 jobs would go, accounting for 11% of its staff in the region. Most of the cuts will be in Germany and Britain, as Ford prepares to ramp up production of electric vehicles, which need fewer workers to make than petrol-powered cars.

In its latest forecast the International Energy Agency said that the share of **renewable energy** in the world's power generation will rise from 29% to 35% in 2025. This means that, although the demand for electricity is expected to keep growing, and 70% of that increase will come from China, India and South-East Asia, emissions from the power sector will "plateau".

That transition to renewable energy is still a work in progress. **Glencore** reported a record annual profit of $34bn, more than half of which came from coal production. The mining and commodities-trading company benefited from soaring coal prices amid Russia's war in Ukraine.

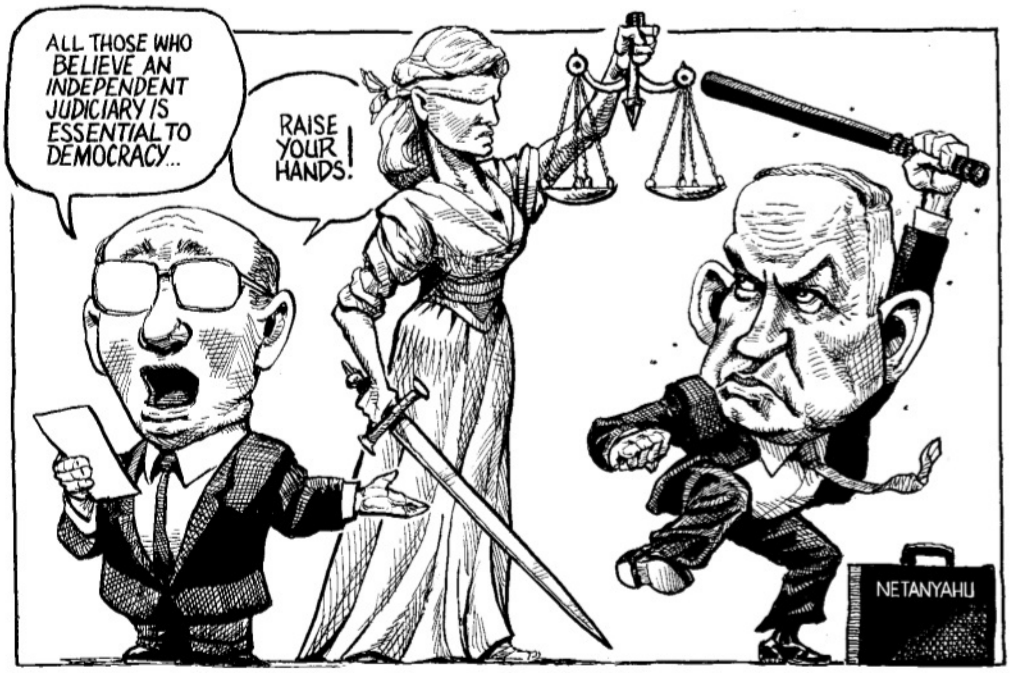
David Malpass announced his resignation as head of the **World Bank**, a year before his term expires. Mr Malpass, who was nominated for the job by Donald Trump, has been under fire for dodging questions about climate change.

Airbnb recorded net income of $1.9bn for last year, its first annual profit. The property-rentals company has seen a surge in bookings from international tourists (during the pandemic people faced restrictions limiting their travel). Rental prices are still significantly higher than before the outbreak of covid, however, raising the issue of affordability. Airbnb is tackling this by increasing the supply of available rooms.

The post-pandemic company has seen a rise in TWATs, people who work in the office on Tuesday, Wednesday and Thursday. Data from WFH Research show that the new normal for working patterns is costing **Manhattan** $12.4bn a year in lost income, as the average worker spends $4,661 less on meals, shopping and entertainment near the office. Sales growth in Manhattan now lags behind other parts of New York City.

The Nobody Inn

In Britain office workers now have fewer pubs in which to drown their sorrows. Research by UHY Hacker Young, a professional-services firm, found an 83% rise in **pubs and bars** filing for insolvency last year. Customers are tightening their belts and costs are rising for pub owners. If that wasn't enough to send you crying into your beer, rail strikes are deterring people from travelling into town for a night out.


ALL THOSE WHO BELIEVE AN INDEPENDENT JUDICIARY IS ESSENTIAL TO DEMOCRACY...
RAISE YOUR HANDS!
NETANYAHU

Still aloft

Inflation will be harder to bring down than markets think

Given how woefully stock and bond portfolios have performed over the past year or so, you may not have noticed that financial markets are floating high on optimism. Yet there is no other way to describe today's investors, who since the autumn have increasingly bet that inflation, the world economy's biggest problem, will fall away without much fuss. The result, many think, will be cuts in interest rates towards the end of 2023, which will help the world's major economies—and most importantly America—avoid a recession. Investors are pricing stocks for a Goldilocks economy in which companies' profits grow healthily while the cost of capital falls.

In anticipation of this welcome turn of events the S&P 500 index of American stocks has risen by nearly 8% since the start of the year. Companies are valued at about 18 times their forward earnings—low by post-pandemic standards, but at the high end of the range that prevailed between 2002 and 2019. And in 2024 those earnings are expected to surge by almost 10%.

It is not just American markets that have jumped. European stocks have risen even more, thanks partly to a warm winter that has curbed energy prices. Money has poured into emerging economies, which are enjoying the twin blessings of China abandoning its zero-covid policy and a cheaper dollar, the result of expectations of looser monetary policy in America.

This is a rosy picture. Unfortunately, as we explain this week, it is probably misguided (see Briefing). The world's battle with inflation is far from over. And that means markets could be in for a nasty correction.

For a sign of what has got investors' hopes up, look at America's latest consumer-price figures, released on February 14th. They showed less inflation over the three months to January than at any time since the start of 2021. Many of the factors which first caused inflation to take off have dissipated. Global supply chains are no longer overwhelmed by surging demand for goods, nor disrupted by the pandemic. As demand for garden furniture and games consoles has cooled, goods prices are falling and there is a glut of microchips. The oil price is lower today than it was before Russia invaded Ukraine a year ago. The picture of falling inflation is repeated around the world: the headline rate is falling in 25 of the 36 mainly rich countries in the OECD.

Yet fluctuations in headline inflation often mask the underlying trend. Look into the details, and it is easy to see that the inflation problem is not fixed. America's "core" prices, which exclude volatile food and energy, grew at an annualised pace of 4.6% over the past three months, and have started gently accelerating. The main source of inflation is now the services sector, which is more exposed to labour costs. In America, Britain, Canada and New Zealand wage growth is still much higher than is consistent with the 2% inflation targets of their respective central banks; pay growth is lower in the euro area, but rising in important economies such as Spain.

That should not be a surprise, given the strength of labour markets. Six of the G7 group of big rich countries enjoy an unemployment rate at or close to the lowest seen this century. America's is the lowest it has been since 1969. It is hard to see how underlying inflation can dissipate while labour markets stay so tight. They are keeping many economies on course for inflation that does not fall below 3-5% or so. That would be less scary than the experience of the past two years. But it would be a big problem for central bankers, who are judged against their targets. It would also blow a hole in investors' optimistic vision.

Whatever happens next, market turbulence seems likely. In recent weeks bond investors have begun moving towards a prediction that central banks do not cut interest rates, but instead keep them high. It is conceivable—just—that rates stay high without seriously denting the economy, while inflation continues to fall. If that happens, markets would be buoyed by robust economic growth. Yet persistently higher rates would inflict losses on bond investors, and continuing elevated risk-free returns would make it harder to justify stocks trading at a large multiple of their earnings.

It is far more likely, however, that high rates will hurt the economy. In the modern era central banks have been bad at pulling off "soft landings", in which they complete a cycle of interest-rate rises without an ensuing recession. History is full of examples of investors wrongly anticipating strong growth towards the end of a bout of monetary tightening, only for a downturn to strike (see Buttonwood). That has been true even in conditions that are less inflationary than today's. Were America the only economy to enter recession, much of the rest of the world would still be dragged down, especially if a flight to safety strengthened the dollar.

There is also the possibility that central banks, faced with a stubborn inflation problem, do not have the stomach to tolerate a recession. Instead, they might allow inflation to run a little above their targets. In the short run that would bring an economic sugar rush. It might also bring benefits in the longer run: eventually interest rates would settle higher on account of higher inflation, keeping them safely away from zero and giving central banks more monetary ammunition during the next recession. For this reason, many economists think the ideal inflation target is above 2%.

Yet managing such a regime shift without wreaking havoc would be an enormous task for central banks. They have spent the past year emphasising their commitment to their current targets, often set by lawmakers. Ditching one regime and establishing another would be a once-in-a-generation policymaking challenge. Decisiveness would be key; in the 1970s a lack of clarity about the goals of monetary policy led to wild swings in the economy, hurting the public and investors alike.

Back to Earth

So far central bankers in the rich world are showing no signs of reversing course. But even if inflation falls or they give up fighting it, policymakers are unlikely to execute a flawless pivot. Whether it is because rates stay high, recession strikes or policy enters a messy period of transition, investors have set themselves up for disappointment. ■

Peak populism

The great moderation

Nicola Sturgeon's resignation is part of an encouraging pattern in British politics

THE IMAGE of Britain as a land of phlegmatic common sense has taken a beating in the past ten years. This is a country that voted to leave the European Union without any coherent plan to make the best of it; whose two main parties offered the electorate the choice of Boris Johnson or Jeremy Corbyn in 2019; and whose union has frayed in the face of successful nationalist movements in Scotland and Northern Ireland.

If one definition of populism is offering simplistic answers to complex questions, British politics has suffered as bad a case as anywhere in the rich world. Now, though, the pendulum is swinging back. The decision of Nicola Sturgeon, Scotland's first minister, to resign as leader of the Scottish National Party (SNP) is the latest evidence that Britain is rediscovering the virtues of moderation.

Ms Sturgeon has devoted her working life to the goal of Scottish independence (see Britain section). That is a legitimate political cause, though not one this newspaper supports, and she has been a talented advocate for it. Her failure to achieve it partly reflects the SNP's poor record of running Scotland's devolved government. But it is also explained by the intemperance of her tactics.

She has taken to calling the barriers that prevent the SNP from holding a second referendum on independence a "democratic outrage". In fact, they are part of the constitution and have been upheld by the judiciary. She has proposed making the next election a de facto ballot on independence, with each vote for the SNP counting as a vote to break away. On her watch, attitudes to independence have become a deeply tribal matter.

With her resignation, that approach seems to have run its course. Polling suggests that Scottish voters are twice as likely to disapprove of Ms Sturgeon as approve of her. They remain unpersuaded of the case for independence and don't much like the idea of a single-issue election. In her valedictory speech Ms Sturgeon herself seemed to recognise that polarisation imposes a ceiling on support for independence, as well as a floor.

South of the border, too, moderation is in vogue. On the same day that Ms Sturgeon announced she was quitting, Sir Keir Starmer, the leader of the Labour Party, confirmed that Mr Corbyn would not be allowed to stand as a Labour candidate in the next election, which is due to take place by January 2025. That sets a symbolic seal on Sir Keir's overhaul of the opposition since taking over in 2020, whereby he has systematically purged the hard left from the party apparatus. Mr Corbyn wanted to smash capitalism; Sir Keir swans around Davos.

The Tories are less disciplined than Labour but they, too, have become more moderate. Rishi Sunak is a reaction to Mr Johnson and Liz Truss. His pitch is based on managerial competence rather than cartoonish radicalism. As public support for Brexit wanes, he is building bridges with the EU. Ms Truss wanted to dynamite orthodoxy; Mr Sunak is keen to work with institutions. The choice facing the British electorate next time will almost certainly be between two uncharismatic pragmatists with great hair—the opposite of Mr Johnson.

If populism has peaked, however, it is far from dead. Brexiteers can still cause immense damage (see Bagehot); the battle to succeed Ms Sturgeon may throw up another divisive SNP leader. And moderation carries dangers of its own: the gradualist approach is not sufficient to meet the challenge of Britain's woeful productivity or to overhaul its creaking public services. But a more rational form of politics is taking hold, in which competence matters more than ideology, problems demand policies rather than scapegoats and a cause like Scottish independence is advanced by good governance rather than grandstanding. ■

A constitutional crisis in Israel

Supreme mistake

Proposed legal reforms are a dreadful answer to a real problem

THERE COMES a point when culture wars and populism impair a country's institutions, society and economy. That moment has arrived in Israel, where on February 20th the Knesset, or parliament, is due to hold the first reading of a legal reform bill (see Middle East & Africa section). The bill is the project of a coalition government led by Binyamin Netanyahu that was formed after elections in November and which includes parties from Israel's far right. In all but the rarest cases, it will prevent the Supreme Court from striking down laws that have passed through the Knesset. And it gives politicians more sway over judicial appointments. Israel's unwritten constitution is flawed, but the changes would make things worse by allowing nearly unchecked majority rule. That could make the country less prosperous, more polarised at home and more vulnerable abroad.

Part of the motivation for the reforms is personal—Mr Netanyahu is fighting corruption charges and has grown to despise the courts. But Israel's judicial system also has genuine problems. The country has no formal constitution. Instead, the Knesset has over the years passed "basic laws" that describe institutions and establish rights. In the 1990s, after over 40 years of relative restraint, the Supreme Court suddenly asserted that these laws transcended normal legislation, and arrogated to itself the right to overrule the Knesset if it thought they were contravened. Such judicial activism was not widely envisioned when the basic laws were passed, sometimes with slim majorities. It has fed a sense that the judiciary is a creature of the old left-leaning secular elite, and out of touch with religious and right-wing Israelis.

Though no definitive draft of the bill yet exists, it is likely to include two radical changes. It will severely limit the ability of the Supreme Court to override the Knesset, or allow a simple majority of the Knesset to overrule Supreme Court decisions. And it will award the government a decisive say over the appointment of judges, who are currently picked by a panel in which lawyers and judges outnumber politicians.

One reason the bill is dangerous is that it leaves Israel with few checks and balances. The Knesset has only one chamber, unlike many legislatures, and Israel's largely ceremonial president cannot block laws. Under the reforms, a government with a narrow majority could do almost anything it wanted. This would amount to majoritarian rule, a project that Mr Netanyahu has long flirted with. He and his coalition partners say they are enabling "the will of the people" to prevail. But liberal democracies require more than this: they also need institutions to prevent an individual from wielding too much power and to protect the rights of individuals and minorities.

IT FEELS LIKE WE ONLY GO BACKWARDS, BIBI

Majoritarianism is especially dangerous in Israel, because of its particular nature as a state. A fifth of citizens are Arabs, who are equal in law but often face discrimination. In addition, splits between Jewish Israelis—left and right, secular and orthodox—can be bitter. Extremist parties, once marginal, are now part of the ruling coalition. Israel also has responsibilities in the West Bank, and though Palestinians would deny that it delivers justice there, the Supreme Court has sometimes been a restraining influence on the expansion of settlements. All countries need judicious checks on power; volatile, divided ones doubly so.

Israeli liberals are up in arms. Big street protests have erupted. Bosses have spoken out. Mr Netanyahu and his government may not much care—their opponents' outrage is useful ammunition in the culture wars. But he must recognise that the damage from impairing the rule of law will go deep.

Stability within Israel could be threatened if Arab citizens believe the state cannot protect their rights. Israel's economic miracle depends on mobile capital and a liberal, globalised tech workforce that generated 54% of goods-and-services exports in 2021. The fear of unrestrained majority rule could further inflame tensions in the West Bank. And the sense that Israel is departing from liberal values will erode support in America, its vital security partner, as President Joe Biden signalled this week.

Mr Netanyahu should halt the legislative process, as Isaac Herzog, Israel's president, has proposed. The judicial and political systems could certainly improve. Judges could be more representative. Relations between courts and parliament could be better defined. But it matters how constitutional reforms are decided. A broad, cross-party consensus should first form, perhaps in a constituent assembly. In many ways this is Israel's moment. Its economy is thriving, it has new friendships in the Arab world through the Abraham accords and Iran, its great enemy, faces unrest at home. Instead of capitalising on this moment Mr Netanyahu is pursuing reforms that will make Israel weaker. He should change course. ■

Green energy

Plug and pay

To decarbonise faster, let renewables firms make money

AMID THE misery of war in Ukraine and the global energy crisis, there is a glimmer of good news. The green transition has speeded up. True, a spike in natural-gas prices fuelled greater demand for coal, the dirtiest of fossil fuels. But it also led consumers to use energy more efficiently. And, more significantly, it spurred investment in renewables around the world. Last year global capital spending on wind and solar assets was greater than investment in new and existing oil and gas wells for the first time. Governments in America and Europe are spending billions on subsidies for clean tech over the next decade; China is offering juicy incentives, too.

As a happy consequence, the green transition may have accelerated by five to ten years (see Finance & economics section). Yet the remarkable thing is that the transition could have proceeded at a faster pace still. Even as governments have loosened the purse-strings, they have begun to blunt the incentives to invest. Sharpening them again will be vital, as on today's trajectory the world is unlikely to reach net zero carbon emissions by 2050, the milestone for limiting temperature rises to 1.5°C above pre-industrial averages by 2100.

One problem is obtaining permits. Endless delays stop firms that want to invest from breaking ground. This has long been an obstacle to new projects in America and Europe; the worrying thing is that some places are going backwards. Denmark is a star in offshore wind. But on February 6th it stopped processing all applications for such projects, after a dawning realisation that it may be in breach of EU law. The gains from cutting red tape are large. The International Energy Agency, an official forecaster, estimates that renewables generation would rise by an extra 25% by 2027 if bureaucratic and financing barriers were removed.

The bigger problem is that some renewables providers are now rethinking their investments altogether, because energy projects are becoming less attractive. Price caps and various taxes, together with rising costs, are putting them off.

Between January 2021 and April 2022 logistical hiccups, post-lockdown rebounds and war-induced disruptions together buoyed the prices of everything from shipping to industrial metals, which in turn raised the prices of solar modules and turbines. Higher interest rates have made money dearer—a headache for builders of green plants, which are much hungrier for capital than their fossil-fuel-fired counterparts.

Such costs would be manageable if they could be passed on. But governments are increasingly micromanaging power markets to keep prices low, or to raise revenue of their own. The EU has imposed a price cap on renewable generators, and many European countries have implemented a windfall tax on their profits. Around the world, auctions for renewables contracts are being designed to keep electricity cheap—so cheap that generators will struggle to make money. That leads them to sell electricity on the spot market instead, which is riskier and less appealing to investors. Some tenders entice developers to compete over how much they are willing to pay to run projects, a system known as "negative bidding". This may bloat costs yet more.

The result has been squeezed profits. The four largest Western turbine-makers are losing money. In January Orsted, the world's largest offshore-wind developer, took a $365m charge on a big American project; on February 8th the renewables arm of Equinor, Norway's state-owned energy giant, reported a widening loss for the fourth quarter of 2022—despite an 81% jump in revenue compared with the same period in 2021. That week Duke Energy and Dominion Energy, two American firms, also booked charges of $1.3bn and $1.5bn, respectively, on chunks of their wind and solar portfolios.

This is clogging up project pipelines. From America to Asia, wind developers are trying to revise their bids or renegotiate financing deals, delaying construction. Some are withdrawing from big tenders, decrying projects as "uninvestible". In America many solar projects are stalled, and in Europe fewer agreements to buy the power they generate are being signed.

Governments are keen to keep power prices low today, but that may be a false economy if it reduces the renewables spending needed for tomorrow. And as more wind and solar capacity is built, developers will probably need to withstand even bigger cost increases: a shortage of copper, say, would push up the prices of cables and wires, and a scarcity of trained workers needed to maintain and operate turbines would boost wages.

All this means that, if investing is to stay attractive, green power will need to be sold at higher prices than governments would like. If the energy transition is to happen fast, there must not be a race to the bottom. ■

Nigeria

A chance for change

Africa's ailing giant needs better leadership. Peter Obi offers the best hope

NIGERIA HAS been cursed with bad rulers. A military regime gave way to democracy in 1999, but since then elections have offered voters an ugly selection of the ancient, the incompetent and, most recently, a former military dictator. Parties have stoked ethnic divisions, intimidated their opponents and bought votes. Many candidates—federal, state and local—seek power to grab a share of the country's oil wealth. Successive governments have been deeply corrupt. Turnout has steadily fallen. But as Nigerians go to the polls on February 25th, Peter Obi, a third-party presidential candidate, offers a measure of hope.

Africa's most populous country is in desperate need of it (see Middle East & Africa section). The economy, the continent's biggest, bursts with youthful potential—half the country is 18 years old or younger. A flourishing Nigeria would boost the whole of Africa. Instead it is dragging it down. Nigerians are poorer now than they were in 2015, when the outgoing president, Muhammadu Buhari, took over. At least 60m (and rising) survive on less than the equivalent of $2.15 per day. Mr Buhari's protectionist policies have made things worse.

In addition, the country is beset by violence. Boko Haram and its jihadist offshoots launched more attacks across the north-east last year than ever before. In the north-west criminal gangs murder and kidnap ordinary people, including schoolchildren. Farmers and herders feud over land. Fully 10,000 Nigerians were killed in conflict last year. And a botched banknote reform just before the election has sparked riots, as local banks have run out of cash. The country is catastrophically failing to achieve its potential.

Turning that round starts with a clean ballot. Rigging elections outright is harder these days but the electoral body and police must clamp down more on intimidation and vote-buying.

Beyond that, much will depend on who wins. Bola Tinubu of the ruling All Progressives Congress is an old-school politician who, at 70 years old, is unlikely to shake things up. He shuns scrutiny. His manifesto veers from the fanciful (tackling jihadists by topping up the water in Lake Chad) to the incoherent (claiming to back both import substitution and the African Continental Free Trade Area). In the 1990s the American government froze some of his assets, accusing him of profiting from drug-trafficking. He denies wrongdoing and reached a settlement with the American authorities.

Atiku Abubakar of the People's Democratic Party, the main opposition, is no better. An ex-vice-president, he is making a sixth run at the presidency. He has grandiose ideas for industrialisation and 1m new police officers but no plan for how to pay for them. Olusegun Obasanjo, the president he served, accused him of embezzling $145m. In 2010 a report by the United States Senate alleged he was implicated in the transfer of $40m in "suspect funds" to America. He also denies wrongdoing.

Mr Obi, a sprightly 61-year-old former state governor who is leading in the polls, offers an alternative. Most striking, he has urged people not to vote along ethnic or religious lines but to favour competence. Should they do so, it would mark a radical shift in Nigerian politics. He has also warned his supporters they should expect no money in return for their votes.

Mr Obi talks of supporting business, freer trade, and getting a grip on Nigeria's mounting debts. He diagnoses the country's failings more precisely than his rivals, though he is not much better at explaining how he would fix them. His promises to scrap the staggeringly wasteful petrol subsidy and rationalise the central bank's many exchange rates are echoed by his opponents.

Mr Obi is not entirely a new broom. He was Mr Abubakar's vice-presidential running-mate in 2019 before switching parties. He has faced questions over undeclared offshore assets. (He says he earned the money in question before he took office as governor.) Even if he wins, his Labour Party is very unlikely to gain a majority in the national assembly, so governing will be hard.

But he is the only candidate to offer Nigerians much hope of change. In a country that has been badly and repeatedly failed by its leaders, he is easily the best choice. ■

COUNSEL

JOIN A LEADING IMPACT INVESTOR

Deploying more than €10 billion of financing each year, the European Bank for Reconstruction and Development (EBRD) is a world leader in climate finance. It also supports small and medium-sized enterprises, infrastructure projects, local manufacturers and many others, with a focus on promoting the sustainable development of the private sector in the emerging markets where it operates.

The EBRD is recruiting for legal counsel to take the lead on the structuring, negotiation, execution and monitoring of the Bank's projects. Transactions range from project financing and corporate, municipal and financial institution lending to sovereign loans, capital market instruments, structured finance, and direct equity and fund investments.

For a comprehensive job description and details of how to apply, visit: jobs.ebrd.com.

About the EBRD: The EBRD, headquartered in London, is a multilateral development bank owned by 71 countries, as well as the European Union and the European Investment Bank. It invests in emerging economies in Europe, Asia and the southern and eastern Mediterranean region.

European Bank
for Reconstruction and Development

IFAD
Investing in rural people

Vice-President of IFAD

The International Fund for Agricultural Development (IFAD) is an international financial institution and a United Nations specialized agency dedicated to eradicating rural poverty and hunger.

IFAD is looking for experienced and recognized professionals with strategic vision, solid team orientation, proven capacity to generate results, and a deep understanding of and commitment to development.

Are you an experienced professional who can provide strategic oversight and direction to an entire organization, including all decentralized offices, ensuring political and strategic engagement with IFAD Member States, as well as with other United Nations agencies and international financial institutions?

IFAD is seeking a strategic and inspiring leader to implement the Fund's strategic direction in furtherance of the twin goals of eradicating food insecurity and facilitating shared prosperity for the world's smallholder farmers and poorest rural populations.

IFAD offers a competitive remuneration and benefits package that includes tax-free salary, dependency allowance, education grant up to university level, medical and group life insurance, home leave and pension plan.

IFAD is committed to achieving diversity and is seeking a balanced workforce from its Member States. Women are particularly encouraged to apply.

For detailed information, visit our website www.ifad.org/careers.

Planning a New Career Challenge?

Unique Access to Confidential Opportunities

InterExec is the global leader in assisting Top Executives to access £200k to £2m+ unadvertised vacancies worldwide.

We act discreetly through our 15,000 strong Headhunter network.

london@interexec.net www.interexec.net +44 (0)20 7256 5085

InterExec
UNIQUE NETWORK ◆ OUTSTANDING TALENT

Africa's space race

There are several geopolitical factors to consider in the plan for a Chinese firm to build a spaceport in Djibouti ("Preparing for launch", January 21st). The project risks eroding the international rules-based order in space. Djibouti is not a party to any of the five core international space-law agreements. Chief among them is the Outer Space Treaty, which among other things, establishes that state parties are liable for damage to other state parties. The Convention on International Liability for Damage Caused by Space Objects expounds on this, clarifying that the launching states assume fault-based liability for any damage caused to other state parties' objects or persons in space. There is no guidance on how to tackle the liability of non-parties, like Djibouti.

Space needs more, not less, trust. Djibouti could, over the five years it will take to build the spaceport, accede to international agreements. Signing the Outer Space Treaty would be a strong first step. However, implementing treaty responsibilities, such as the obligation to continue the supervision of space objects that have been launched from its territory, is an onerous technical challenge. Djibouti has a frighteningly steep hill to climb to rise beyond a spaceport of convenience, but it should act to minimise the consequences to trust and co-operation in space.

BENJAMIN SILVERSTEIN
Research analyst
Carnegie Space Project
Carnegie Endowment for International Peace
Washington, DC

Free speech in Turkey

Your special report on Turkey (January 21st) made passing reference to Turkey's treatment of critical journalists and opponents. Can Dundar, himself previously imprisoned and subjected to an assassination attempt in Turkey and now living in exile in Germany, wrote an article recently in *Die Zeit*. In it he lists some of those critics who are being subjected to surveillance, persecution and pursuit in at least 31 countries that have provided them with asylum.

There have been physical attacks on individuals in Sweden and Germany, and the publication of home addresses of those who attract Ankara's disapproval. Foreign governments and Interpol are regularly approached with requests for the extradition of critics of the Ankara government, with such individuals now customarily described as terrorists or supporters or enablers of terrorism.

This behaviour has become more public through Turkey's demands for accepting Swedish and Finnish membership of NATO. Such practices are already a threat to Turkish democracy and freedom of expression, with implications for responses within NATO.

BLAINE STOTHARD
London

The university of life

I disagree that "things only get worse" for Paul Pennyfeather in Evelyn Waugh's "Decline and Fall" after he is sent down from the fictional Scone College in Oxford ("Rishi Pennyfeather", January 28th). Pennyfeather's adventures in a series of situations teach him far more about life than he would have learned from his schooldays, his university career, or his intended profession as a clergyman.

He meets and gets an understanding of the "preposterous inhabitants" of the private school where he works for a while as a teacher. He is initiated into sex by a beautiful and wealthy woman. He hears confessions from a series of vivid characters, among them a child abuser, a clergyman who is lacking faith, a criminal impostor, and a successful rags-to-riches politician. He undergoes the experience of prison, where, like anyone who has been through the public-school experience, he feels "comparatively at home". He will in due course be ordained as a clergyman, but one endowed with a far deeper and richer acquaintance with human nature and life than would have been the case if he had never been debagged by the Bollinger (aka Bullingdon) Club.

Rishi Sunak, as you correctly say, "is surrounded by colleagues whose decisions cause him harm". The effect on Paul Pennyfeather of the decisions made by others is, ultimately, to do him good.

SIMON JACKSON
Brighton

Pakistan's power blackout

It was disingenuous for *The Economist* to characterise the electricity blackout of January 23rd in Pakistan as "indicative of an economic crisis" ("Broken and broke", February 11th). There was no correlation between the blackout and the country's economic situation.

The blackout was a black-swan event triggered by wide voltage fluctuations in the national grid that in turn caused the automatic protective shutdown of power plants. We began to recover electricity supply within 12 hours, and returned the country to blackout-free normality in 36 hours. Pakistan has sufficient stocks of fuel as well as finances to operate its power plants for the foreseeable future.

KHURRAM DASTGIR-KHAN
Minister for power in the federal government
Islamabad

Too much banking regulation

Your briefing on zero-sum economics told the story of deglobalisation ("Efficiency be damned", January 14th). An important but overlooked factor in this is the effort by American and European regulators to ring-fence banks geographically, and thereby other forms of finance and trade. That effort has taken two forms: the ring-fencing of capital and liquidity in the wake of Lehman Brothers and the anti-money laundering mandates to "de-risk" clients in developing countries.

The ring-fencing of capital was needed, but the reforms have been harmful, causing capital to become trapped. The money-laundering mandates take the form of regulators defining industries or regions as "high risk", which triggers extraordinary compliance costs and threats of ruinous fines and business restrictions. The effects of these regulatory mandates may be larger than any tariff or export or import restriction, but receive far less attention, perhaps because they are less transparent and are more complex.

GREG BAER
President and CEO
Bank Policy Institute
Washington, DC

Richard Nixon once told Golda Meir that he would trade any three American generals for Moshe Dayan, a famed Israeli commander. "I'll take General Motors, General Electric and General Dynamics," the prime minister replied. Meir understood that GM gave America the power to set its own course. Today GM depends on chips from overseas.

DOUGLAS GREEN
Vancouver, Washington

Past it

Patrick Slattery made a good point about Georges Clemenceau being 76 when he became the leader of France (Letters, January 28th). In a recent interview at an anti-government rally Jean-Luc Mélenchon, leader of the far-left La France Insoumise party, declared that it was outrageous to expect people to work until 64, because by the age of 62 "their bodies and nerves are worn out." Mr Mélenchon is 71.

ANNE-LOUISE CROCKER
Shoreham, Kent

Letters are welcome and should be addressed to the Editor at
The Economist, The Adelphi Building,
1-11 John Adam Street, London WC2N 6HT
Email: letters@economist.com
More letters are available at:
Economist.com/letters

A hard road

Inflation is over, think a large number of investors. Not so fast

For the past year and a half high inflation has tormented central banks, haunted financial markets and weighed heavily on the minds—and wallets—of the public. By bringing about the sharpest tightening of monetary policy since the 1980s it shattered the previous consensus that rich-world interest rates would stay low for ever. In 2022 that created havoc in asset prices, causing everything from bitcoin to bonds to fall sharply in value. In 2023 it may yet do the same to the real economy: the average economic forecaster thinks that a recession in America is an odds-on bet. When economists write the history of the post-pandemic era, the resurgence of inflation and central banks' battle with it will be the defining story.

But when will it come to an end? A large number of investors and analysts think the answer could be soon. Central banks, in contrast, worry that wage growth remains too high to declare victory. If the dispute is resolved in central bankers' favour, it could cause upheaval in the markets. And either way, it raises intriguing questions about how best to predict inflation.

The optimists can point to a growing pile of evidence. In 25 of the 36 OECD countries for which there is monthly data, headline inflation is falling. Good news has been rolling in for months (see chart 1 on next page). Forecasters had expected Europe's inflation to be 8.9% in January, but the official preliminary estimate, released on February 1st, was only 8.5%. In the three months to January America's consumer prices rose at an annualised rate of 3.8%, the lowest reading in two years, according to data released on February 14th.

This time last year central bankers were up at night worrying that the public's growing expectations of high inflation would become self-fulfilling. But as inflation has fallen, so too have predictions regarding what comes next. The price of inflation-linked swaps suggests America's consumer price index (CPI) will rise by just 2.9% over the next year. Because the Federal Reserve targets an index which grows more slowly than CPI, investors' expectations imply the central bank will be closing in on its 2% inflation target in early 2024.

Researchers at the Federal Reserve Bank of Cleveland; Morning Consult, a data firm; and Raphael Schoenle of Brandeis University publish a gauge of public expectations of inflation for the following year that is consistent across countries. Between August and December the median expected rate across rich countries has fallen by about a percentage point. Alternative Macro Signals, a consultancy, runs millions of news articles in several languages through a model to construct "news inflationary pressure indices". The core index, which is good at predicting official numbers, recently fell below its pre-pandemic level in America. Google-search volumes for "inflation" are falling the world over.

Some economists believe the game is up. "I don't think people fully appreciate that high inflation in the US and the Euro area is over," wrote Jan Eeckhout, an economist, in late January. His measure of "instantaneous inflation", which tries to prioritise the most recent trends, is at a level consistent with the Fed's target. In another recent analysis Alberto Cavallo of Harvard University looks at real-time price indices, which State Street Global Markets and PriceStats derive from the websites of large retailers, in order to identify turning points quickly. The indices suggest that in many rich countries, including America, Britain ▶▶

and Spain, inflation fever has broken, with a decisive share of the price basket shifting to a lower inflation trend.

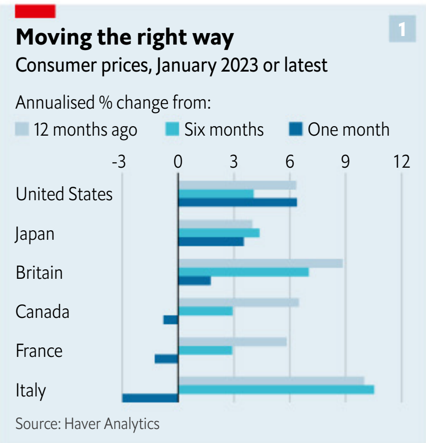
Financial markets are celebrating. Unexpectedly low inflation should mean there is less need for central banks to raise interest rates. It should also allow them to prioritise economic growth—ie, make them more willing to cut rates when necessary to see off a downturn. Thus, lower inflation makes a fabled "soft landing", in which a full cycle of interest-rate rises does not lead to a recession, more likely.

This is what investors appear to be expecting. The prices of bonds and swaps imply that central banks in most big, rich economies and many smaller or poorer ones will start loosening monetary policy within the next year. This prospect has propelled global stockmarkets, which are expecting the goldilocks combination of a lower cost of capital and healthy growth in earnings. The S&P 500 index of stocks is up nearly 8% this year. Emerging market stocks are up too. On a trade-weighted basis the dollar is down more than 6% since its peak in October, a sign of investors' renewed appetite for risk.

Record scratch

Unfortunately there is a large hitch. Many policymakers are disowning investors' optimism. The disinflationary process, warned Jerome Powell, chairman of the Fed, on February 7th, "has a long way to go". The same day Isabel Schnabel of the European Central Bank warned that underlying upward pressure on prices remained "extraordinarily high". Central bankers are worried that their economies—and especially their labour markets—are overheating. Though they are slowing the pace at which they raise interest rates, they are wary of repeating the mistakes of the 1970s, during which monetary policy was loosened in response to falling inflation only for prices to surge once more.

The flipside of markets' optimism is their vulnerability to central bankers' hawkishness. If inflation does not fall as they expect, interest rates will stay high or rise further. Stockmarkets would face a double whammy, from a higher discount rate, which mechanically reduces asset prices, and an even higher risk of recession. Have investors got carried away?



Moving the right way

Consumer prices, January 2023 or latest

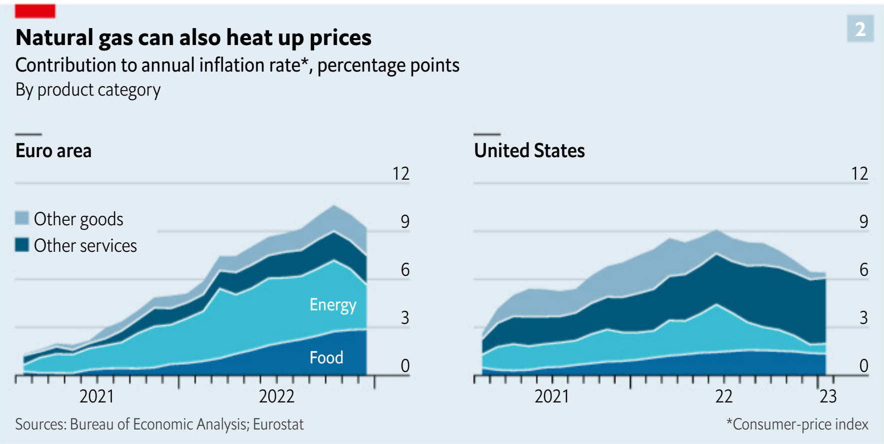
Source: Haver Analytics

Answering that question requires understanding where inflation came from. The problem began in 2021 with a demand surge in America, fuelled by pandemic-related fiscal stimulus that reached a cumulative 26% of GDP after President Joe Biden signed the $1.9trn American Recovery Act that year. Vast handouts to households supercharged demand for goods, from home gym equipment to video-game consoles, among consumers who were staying at home more because of the pandemic.

America's enormous appetite for imports overwhelmed the world's supply chains, which were in any case operating less efficiently because of disease-prevention measures and factory shutdowns. Production delays and shortages of crucial inputs such as microchips caused goods inflation to spill over to much of the rest of the world. Then, over time, inflation broadened out, into rents, wages and reopening service industries.

In some countries, many workers had retired or otherwise left the labour force during the pandemic, contributing to the imbalance between supply and demand. A rebound in global energy prices in 2021 was compounded by Russia's invasion of Ukraine a year ago. The prices of oil and especially natural gas soared, in Europe in particular (see chart 2).

Today's falls in inflation reflect the easing or, in some cases, unwinding of these forces. America's demand for goods is still unusually high, but supply chains have adapted. There is a chips glut rather than a chips shortage. From September to December, America's goods prices gently fell. The oil price is around $85 a barrel, down from a high of nearly $140 a barrel in March 2022. Some workers have returned to the labour force. Even with supplies from Russia all but cut off, Europe's gas prices have tumbled during a warm winter.



Natural gas can also heat up prices

Contribution to annual inflation rate*, percentage points

By product category

Sources: Bureau of Economic Analysis; Eurostat

*Consumer-price index

Some doves say the receding of temporary factors vindicates central bankers' initial judgment that inflation would be transitory, albeit a year and a half behind schedule. Higher interest rates are typically thought to bite only after a delay of at least a year and perhaps two, a phenomenon Milton Friedman dubbed the "long and variable lags" of monetary policy. On this view it is too soon for higher interest rates to be having much of an effect on the world economy. By the time they bite, inflation will have gone away on its own.

Yet global growth has been slowing. A year ago the IMF forecast it to be 3.8% this year. It has since revised that down to 2.9%. The war in Ukraine is to blame for some of that. But in America, which, as a net energy exporter, has been much less affected by the crisis than Europe, GDP in the final quarter of 2022 was only 1% higher than a year earlier.

What is more, the latest economic research contests the conventional view of "long and variable lags". A flurry of recent studies, surveyed by Dario Perkins of TS Lombard, a research firm, suggests that changes to interest rates may have their strongest impact after a delay of just 6-9 months. Researchers at the Kansas City Fed have argued that lags have become shorter over time in part because central bankers have become better at communicating their plans in advance. Joseph Briggs of Goldman Sachs, a bank, says that even Friedman's dictum has long been misunderstood. Although it may take a while for monetary policy to have its full effect, growth can fall quickly after rate rises.

The puzzling thing is that the economic slowdown is not visible in labour markets, in which competition for workers remains fierce. Six members of the G7, a club of big, rich countries, enjoy an unemployment rate at or close to the lowest seen this century (Italy is the exception).

Despite a series of headline-grabbing lay-offs at big banks and technology companies, America's non-farm payrolls grew ▸▸

by an enormous 517,000 in January, more than five times most estimates of a sustainable long-term pace, given population growth. Job vacancies grew to 11m in December, nearly twice the number of unemployed. In many countries, but especially in America, competition for workers continues to generate wage growth that is too high to permit inflation of just 2%. In the euro zone wage growth seems to be rising.

This troubles the likes of Mr Powell and Ms Schnabel. They want abundant jobs. But they see excessive wage growth as the best indicator that inflation is likely to remain above target, because of its relevance both to firms' costs and to household incomes. Policymakers cannot take much comfort from tumbling goods and energy prices if wages threaten to undo the benefit. To make this point Mr Powell has emphasised the tight linkages between wages and a price index that excludes goods, energy and housing. In the past three months this index grew by 4.5% at an annualised rate—lower than headline inflation, but too high for comfort.

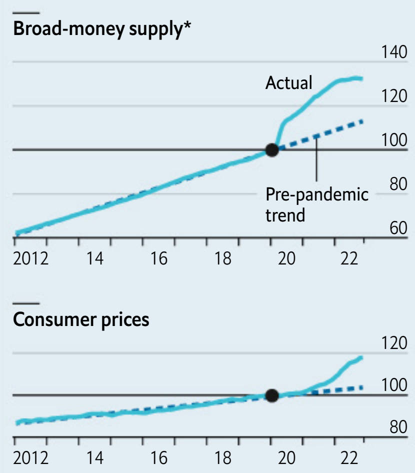
Might wage growth fall without job losses or slower hiring? Investors seem to think so: across America, Britain and the euro area they have recently rewarded companies which do better than average when wage pressures are weak—say, because they have high labour costs relative to sales. But wage growth falling while employment and vacancies remained high would defy the models central banks have used to forecast inflation for decades, as well as simple intuition about the supply and demand for workers. It would represent a second consecutive failure by central bankers, who, having not seen inflation coming, would also have failed to predict its sudden demise.

Yet this sort of "immaculate disinflation" is possible, claim one group of economists: those who study money. In 2020 they were among the few to worry about a burst of inflation. Today they are among the most open to the idea that inflation—of both prices and wages—could go away relatively painlessly. Their argument is that the world economy has been suffering what used to be called a "monetary overhang", in which it must work off a one-time change to the supply of money caused by a burst of stimulus. Once that overhang has dissipated, things should return to normal, argues Chris Marsh of Exante Data, a research firm. Monetary overhangs, which were experienced after the second world war in the rich world and in many post-Soviet economies in the 1990s, have not typically led to persistent inflation.

Tracking the money supply is deeply unfashionable. Since the 1980s central banks have generally focused on interest rates rather than trying to fix the amount of money in circulation. Money does not even feature in most state-of-the-art models of inflation, which are focused on interest rates, the real economy and inflation expectations. Yet money supply was one of the few indicators to provide advance warning of inflation: across the OECD, a broad measure of it rose by 12% in just six months after February 2020. A recent study by economists at the Bank for International Settlements finds that countries with stronger money growth saw markedly higher inflation, and that incorporating money growth into inflation forecasts would have improved their accuracy.

Money talks

OECD countries, January 2020=100



Source: OECD

*Cash and near-cash equivalents

Recently the broad measure of the money supply has begun to shrink, as monetary policy has been tightened. And the monetary overhang is now smaller than it was: the broad money supply in the OECD is today 17% above its long-term trend, but consumer prices, at 14% above trend, are not far behind (see chart 3).

Are doves who argued that inflation was transitory, having lost the battle, therefore about to win the war—and to tear down economists' models? The trouble is that they could be right about today and wrong about tomorrow. There is nothing to stop a monetary overhang being followed by a more conventional economic overheat. The American and British labour markets in particular are tight enough that they would have central bankers worried even if inflation had been under control for the past two years. The last time America's unemployment rate was as low as it is today was 1969, when the economy was going through a textbook inflationary surge.

There are also some indications that the American economy is accelerating, perhaps propelled by growing optimism about its trajectory in recent months. For example, some analysts think the housing market, which has been hit by higher rates, is bottoming out. Sales of new homes are rising gently and mortgage applications, though volatile, seem to be recovering.

There is also a risk that, as convoluted as it sounds, some disinflationary forces are themselves transitory. The falling price of energy and goods reduces overall inflation, but will not last for ever. Consider used cars in America. Their prices have been unusually volatile, shooting up in mid-2021 but falling for most of 2022. In January the fall in their price compared with a year earlier reduced the overall consumer price index by nearly 0.5 percentage points. But an index of used-vehicle prices produced by Manheim, a car auction firm, showed prices rising that month (official data still show price falls).

With furrowed brow

Another worrying possibility is of further shocks to energy markets. One worry is that the oil price rebounds as China's rapid economic recovery from its zero-covid regime gathers more steam. Goldman Sachs estimates that Chinese oil demand is roughly 1.6m barrels a day below trend. Reversion to the trend could boost prices by about $15 per barrel. In Europe there is still a danger that gas prices rebound next winter, especially if it is cold. A recurring energy shock would be another echo of the 1970s, which featured multiple oil crises.

There are signs that investors are conscious of these risks. The Minneapolis Fed calculates from derivatives prices the implied probability that American inflation will average above 3% or, alternatively, below 1% over the next five years. The current readings are about 30% and 20%, respectively. The implied chance of a surprise in either direction is about twice as high as it was before the pandemic. And with good reason: markets were caught off-guard by the return of inflation just as badly as central bankers. The danger now is that they underestimate its persistence. ■

Taking on Trump

Haley's comma

CHARLESTON, SOUTH CAROLINA

A long-shot candidacy complicates Republicans' chances of finding a new leader

When a new fighter enters the arena to go up against a legend, the crowd braces for a good show. But if the matchup is too lopsided the brawl is no fun. That was the sense when Nikki Haley, a former governor of South Carolina and Donald Trump's first UN ambassador, announced her presidential run on Twitter on February 14th, becoming the first Republican formally to challenge her former boss. At a launch event in an open-air shed in Charleston the next day, the crowd roared when she suggested mandatory mental-competency tests for politicians over 75. Ms Haley climbs into the ring as a lightweight. But her candidacy helps illustrate the problems of the Republican Party and the nature of the coming contest.

For one thing, it shows that Mr Trump will face competition. Other, weightier contenders have been limbering up, including by writing books in readiness for the fight. Mike Pence, the former vice-president, and Mike Pompeo, CIA director and then secretary of state under Mr Trump, have produced memoirs. And the man shaping up as the most formidable challenger, Ron DeSantis, Florida's governor, is due to publish his "blueprint for America's revival" on February 28th. A crowded field suits Mr Trump (it helped him secure his party's nomination in 2016). He has said that Ms Haley "should definitely run".

Like many other potential candidates—and the party as a whole, which tied itself to a person rather than to ideas—Ms Haley has been bruised by association with Mr Trump. As governor she demonstrated a less angry brand of Republicanism. After a white supremacist killed nine black churchgoers in Charleston in 2015 she campaigned to remove the confederate flag from the statehouse. The daughter of Indian immigrants, she took issue with Mr Trump's distaste for foreigners and disrespect for women. Even after he easily won her home state's presidential primary in 2016, she reviled his cosiness with a former grand wizard of the Ku Klux Klan, condemned his plan to build a border wall and chided his character. She backed Marco Rubio, a senator from Florida, and later Ted Cruz of Texas, for president instead.

→ Also in this section

19 Youth curfews

20 Renters' rights

20 The Supreme Court and the algorithm

21 Debating with prisoners

24 Balloons and UFOs

24 Drag shows under attack

— Lexington is away

But in 2016, when Mr Trump asked her to be the country's ambassador to the UN, she made a Faustian bargain: the foreign-policy post would pad her résumé even if it meant aligning herself with Trumpism. At the UN she did not share her boss's fondness for authoritarianism. She called herself "a bull in a china shop"; she announced sanctions on Russia, only for the administration to say she had spoken out of turn. Yet her criticism of Mr Trump subsided. Her resignation, after two years, was marked by accolades from the president. She was the rare official to cross him and leave the administration nicknameless.

In her own book, published in October, Ms Haley likens herself to Margaret Thatcher, Britain's cold-war prime minister. Both women were not afraid to make enemies to get ahead. But whereas the Iron Lady refused to make U-turns, Ms Haley too often swivels. When Mr Trump claimed Joe Biden stole the 2020 election, she was silent. It was not until a pro-Trump mob stormed the Capitol on January 6th 2021 that she decried his denialism. By October she was backing him again: “I don’t want us to go back to the days before Trump,” she told the *Wall Street Journal*.

Such spinelessness makes her an unappealing choice both to the MAGA base and to more traditional conservatives. The latest YouGov/Yahoo poll shows that just 5% of Republican-leaning voters would back her for the party’s nomination. Mr Trump and Mr DeSantis are far ahead of the pack, with 37% and 35% of the vote respectively.

Mr DeSantis at least benefits from having his own success story to tell. Florida is booming. His anti-woke message has broad appeal among Republicans (and beyond). And he is a proven vote-winner, having stormed to re-election as governor last November with a 19-point margin.

Other contenders have to work harder to detach themselves from their old boss. Once Mr Trump’s steadfast sidekick, Mr Pence refused to overturn the 2020 election, and now works criticism of the ex-president’s anti-democratic moves into campaign-like speeches in early-voting states. Mr Pompeo remained obsequious while in the administration (“He’s like a heat-seeking missile for Trump’s arse,” a former ambassador said of him), but has since sought to create some distance from that uncomfortable closeness. He has also lost an impressive amount of weight—seen by some as a sign of serious intent.

Almost a year before the Iowa caucuses, it is clear that Mr Trump will not get the effortless nomination he may have hoped for. The poor showing of Trump-endorsed candidates in the midterm elections suggests that voters are no longer in thrall to him. Early strength in the polls for Mr DeSantis, who shares many of the former president’s ideas without posing such a threat to democracy, points to Mr Trump’s vulnerability—which may tempt many more hopefuls to join the fray.

Yet the more crowded the contest becomes, the harder it will be for any single rival to stand up to Mr Trump. Many party bigwigs are therefore keen to see the fight narrowed down as quickly as possible. If Mr Trump wins the nomination, they fear, Mr Biden could crush him in a rematch.

The party’s wealthiest donors seem more willing to cast Mr Trump aside than his political rivals are. The Koch network is not planning to support him. Blackstone’s CEO, Steve Schwarzman, and the founder of Interactive Brokers, Thomas Peterffy, who together are worth almost $60bn, are also tired of him. Ken Griffin, Citadel’s boss, who gave over $100m to midterm candidates, has endorsed Mr DeSantis.

Such funders know that by helping Ms Haley, and diluting the opposition to Mr Trump, they could put the party at risk. That may make her candidacy short-lived. Even in South Carolina she could face stiff competition from Tim Scott, the country’s only black Republican senator. She could perhaps piggyback her way to the White House as vice-president on someone else’s ticket (though rivals for that slot could include Kari Lake, Arizona’s firebrand, and Kristi Noem, South Dakota’s governor). In 2017 Ms Haley said that she wears heels not for fashion, but so that if she sees something wrong she can “kick ’em every single time”. Much has since been wrong in the Republican Party. The trouble is that Ms Haley, and too many of her colleagues, seem to have given up on kicking. ■

Youth crime

Homeward bound

ATLANTA

In the wake of violence cities resort to ineffective youth curfews

“THERE IS NOTHING open after 11pm except for 7-Elevens and trouble,” Rashawn Ray, a sociologist, recalls his grandmother warning him. That sentiment helps explain why more than 400 American towns keep youth-curfew laws on the books. Most forbid teenagers from being in public from midnight to dawn, with exceptions for work, school or emergencies. Some are stricter. In the French Quarter of New Orleans 16-year-olds can be taken into police custody if they are caught on the streets after 8pm. Curfew laws have long gone unenforced. But many cities are tightening their grip.

Times of trouble

After a 12- and a 15-year-old were killed in a gang shoot-out in November, an Atlanta city councillor proposed shifting the 11pm curfew to 7pm. Birmingham, Chicago and New Orleans have started enforcing old curfews; Philadelphia, new ones.

Fear of untamed teenagers made curfews popular. In November 1995 a criminologist, John DiIulio, warned the public of “superpredators”: “hardened, remorseless juveniles” who would “kill or maim on impulse”. Youth crime had risen as overall crime fell, Mr DiIulio wrote, and “wolf packs” of boys were to blame. Just five months later Bill Clinton’s Department of Justice released a report urging towns to keep teenagers indoors after dark. By 2009, 84% of cities with more than 180,000 residents had enacted youth-curfew laws.

There is little evidence that curfews curtail crime. They may even spur more of it. In 2015 economists found that stricter curfews in Washington, DC, led to more gunshots fired during curfews. With fewer people on the streets, crime flourished. A meta-analysis in 2016 by the Campbell Collaboration, a research network, found that curfews do not reduce juvenile victimisation. And shutting teenagers in could pose dangers: rates of child abuse probably rose during covid-19 lockdowns, when families were confined to small spaces.

Declaring curfews makes politicians look tough on crime. But implementing them is hard. Enforcement could distract police from more pressing matters, while also giving them a reason to arrest any youngster they choose, says Doug Shipman, president of Atlanta’s city council. Crime data from Austin, Philadelphia and New Orleans show that black teenagers were picked up for curfew violations far more than their white peers. In June the police chief of Canton, Ohio, announced that the city’s new curfew was not intended to reduce violence, but to identify parents who failed to supervise their children properly. Yet that could unduly penalise parents who need to work night shifts.

In Birmingham, a majority-black city, parents whose children violate the curfew must appear before a judge, who sets the family up with services. Recreation centres try to tempt gun-toting children away from hot-headed disputes. The city does not lock parents up, but will fine them if their kids are not compliant. “Policing is no substitute for good parenting,” says the mayor, Randall Woodfin. “We’ve got to wrap our arms around our children and make sure we know where they are.”

Atlanta’s city council is reviewing whether it is constitutional to keep children in after 8pm. The National Youth

Rights Association, an advocacy group, thinks it is not. “Today we would never consider curfews for women or ethnic groups,” says Neil Bhateja, a board member. The fact that teenagers’ brains are not yet fully developed, he argues, is no reason to strip them of their right to walk to the grocery store after dinner. Despite clear cognitive declines in elderly people, lawmakers do not restrict their movement.

The legal waters are murky, however. Some courts have protected curfews, arguing that the government has a “narrowly tailored” and “compelling” interest to shut teenagers in during crime spikes. Others have struck them down by emphasising a child’s right to privacy or parents’ right to bring up their children as they see fit. The new proposal in Atlanta is unlikely to pass, but the city’s 11pm curfew will probably remain in place. ■

Housing

The rent is too damn high

LOS ANGELES

Pandemic eviction bans have spawned a renters’-rights movement

A ban on evictions sounds simple. In practice, it was anything but. As covid-19 spread across America in early 2020, the federal government, 43 states and countless municipalities issued some kind of eviction moratorium. The result was a patchwork of policies to help renters stay in their homes. Some places prevented landlords from filing petitions to evict. Elsewhere, courts stopped processing evictions, or officials avoided locking people out of their homes. Several governments offered grace periods for late rent.

The reason for this flurry of tenant protections was fear of contagion. As lockdowns hobbled the economy and millions of Americans lost their jobs, officials worried that evictions would force families and friends to move in together, spreading the virus. It is tricky to measure the success of eviction moratoriums alone, says Peter Hepburn, a researcher at Princeton University’s Eviction Lab. Officials were also doling out unemployment insurance and rent relief. But a paper published in 2022 in *Housing Policy Debate*, which Mr Hepburn helped write, suggests that when a moratorium was in place eviction filings were nearly 50% below their historical average.

By 2023 most eviction moratoriums had expired. But not in Los Angeles. Kyle Nelson, a researcher at the University of California, Los Angeles, has been tracking eviction filings in Los Angeles County. The number of evictions sought by landlords in 2020 and 2021 was about a third of those filed in 2019 (see chart). Officials fear that allowing a wave of them now will worsen the city’s homelessness crisis. Weekly census data suggest that in January 450,000 renters in the LA area were behind on their rent, and 92,000 were worried about being evicted in the next two months.

The city finally let its eviction moratorium expire at the end of January. But the effect will be muted, for two reasons. First, the surrounding county decided at the last minute to extend its ban on evictions until the end of March. Second, Los Angeles passed a slew of new policies to protect renters. Landlords will be able to evict tenants only for unpaid rent or lease violations. The new rules also establish timelines to pay rent owed during the pandemic, and a minimum amount that tenants need to owe before they can be kicked out. “We’re not going back to a status quo that had been very hard on renters in Los Angeles,” says Nithya Raman, the chair of the city council’s housing committee.

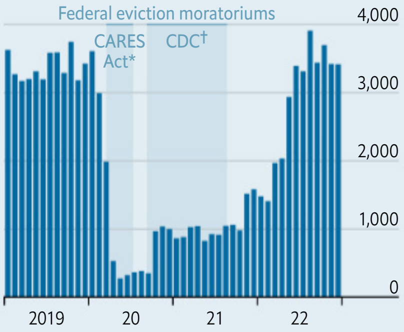
Worries about housing insecurity are not confined to pricey Southern California. A new report from Moody’s Analytics, a research firm, suggests that for the first time in at least 20 years Americans, on average, are “rent-burdened”, meaning they put at least 30% of their income towards rent. The adoption of pandemic anti-eviction measures and rising rents have spurred national interest in tenant protections. According to the National Low Income Housing Coalition, 32 states and 73 municipalities have passed new tenant protections since January 2021. Democrats in Oregon’s state legislature and Denver’s crowded mayoral race are advocating rent control. In January, the Biden administration released its plan for a renters’ bill of rights.

Landlords and developers are not happy that tenant protections are in fashion. Two surveys of landlords, from Harvard University and the University of California, Berkeley, suggest that financial hardship during the pandemic has led landlords to consider leaving the rental market altogether, potentially limiting the supply of units and pushing up rents further.

Many anti-eviction activists view landlords and developers as ruthless capitalists. But Los Angeles needs them onside if it wants to tackle its housing shortage. Tenant protections alone can’t keep people housed, says Tim Thomas, of UC-Berkeley’s Urban Displacement Project. Cities need to preserve existing affordable housing and produce new units, he argues. In LA, where single-family homes sit on plots big enough for apartment buildings, there is growing agreement that the city needs a building boom. “Supply is part of the response to our housing crisis, our homelessness crisis, our gentrification and displacement crisis,” says Ms Raman. “It has to be the city’s priority.” ■

Protection bracket

Los Angeles County, monthly eviction filings



*Coronavirus Aid, Relief and Economic Security Act

†Centres for Disease Control and Prevention

Sources: Los Angeles County Superior Court; Kyle Nelson

The Supreme Court and the algorithm

The power of suggestion

NEW YORK

Did YouTube’s video recommendations abet Islamic State’s attacks?

In 1941, in “The Library of Babel”, Jorge Luis Borges imagines a vast collection of books containing every possible permutation of letters, commas and full stops. Any wisdom in the stacks is dwarfed by endless volumes of gibberish. With no locatable index, every search for knowledge is futile. Librarians are on the verge of suicide.

Borges’s nightmarish repository is a cautionary tale for the Supreme Court next week, as it takes up two cases involving a fiercely contested provision of a nearly 30-year-old law regulating web communications. If the justices use *Gonzalez v Google* and *Taamneh v Twitter* to crack down on the algorithms online platforms use to curate content, Americans may soon find it much harder to navigate the 2.5 quintillion bytes of data added to the internet each day.

The law, Section 230 of the Communications Decency Act of 1996, has been interpreted by federal courts to do two things. First, it immunises both “provider[s]” and “user[s]” of “an interactive computer service” from liability for potentially harmful posts created by other people. Second, it allows platforms to take down posts that are “obscene…excessively violent, harassing or otherwise objectionable”—even if they are constitutionally protected—without risking liability for any such content they happen to leave up.

Disgruntlement with Section 230 is bipartisan. Both Donald Trump and Joe Biden have called for its repeal (though Mr

Biden now says he prefers to reform it). Scepticism on the right has focused on licence the law affords technology companies to censor conservative speech. Disquiet on the left stems from a perception that the law permits websites to spread misinformation and vitriol that can fuel events like the insurrection of January 6th 2021.

Tragedy underlies both *Gonzalez* and *Taamneh*. In 2015 Nohemi Gonzalez, an American woman, was murdered in an Islamic State (IS) attack in Paris. Her family says the algorithms on YouTube (which is owned by Google) fed radicalising videos to the terrorists who killed her. The *Taamneh* plaintiffs are relatives of Nawras Alassaf, a Jordanian killed in Istanbul in 2017. They contend that Section 230 should not hide the role Twitter, Facebook and Google played in grooming the IS perpetrator.

The Biden administration is taking a nuanced stand against the tech giants. In its brief to the justices, the Department of Justice says Section 230 protects “the dissemination of videos” on YouTube by users—including terrorist training videos by the likes of IS. But the platform’s “recommendation message[s]” are another story, the department says. These nudges, autoloaded videos in a user’s “Up next” sidebar, arise from “YouTube’s own platform-design choices” and should not be protected under the umbrella of Section 230.

Some 30 amicus (or friend-of-the-court) briefs urge the justices to rein in social-media websites’ immunity from lawsuits. The Anti-Defamation League, a civil-rights group, writes that the companies’ strategy of keeping us “scrolling and clicking” through targeted algorithms threatens “vulnerable communities most at risk of online harassment and related offline violence”. Ted Cruz, a senator, along with 16 fellow Republican lawmakers, decries the “near-absolute immunity” that lower courts’ decisions have conferred “on Big Tech companies to alter and push harmful content” under Section 230.

But nearly 50 amicus briefs opposing a rejigging of Section 230 warn of unintended consequences. An internet resembling Borges’s useless library is one worry. Meta, which owns Facebook, notes that “virtually every online service” (from weather to cooking to sports) highlights content that is “relevant” to particular users. The algorithms matching posts with users are “indispensable”, the company says, to sift through “thousands or millions” of articles, photos or reviews. Yelp adds that holding companies liable for restaurant reviews posted by users would “trigger an onslaught of suits”. Kneecapping Section 230 would be “devastating” for Wikipedia and other small-budget or non-profit sites, its parent foundation warns.

Danielle Citron and Mary Ann Franks, law professors at the University of Virginia and University of Miami, argue that the courts have long misread Section 230. There is, they say, no “boundless immunity…for harmful third-party content”. But Mike Masnick, founder of Techdirt, a blog, thinks such a reconceptualisation of the law would invite “havoc”. The crux of Section 230, he says, is pinning responsibility for harmful speech on the “proper party”: the person who made the content, not the “tool” he uses to communicate it. If that distinction disappears, Mr Masnick cautions, vexatious lawsuits would blossom whenever “someone somewhere did something bad with a tool”.

Thomas Wheeler, who chaired the Federal Communications Commission under Barack Obama, worries that tech companies have too much freedom to “bombard” users with potentially harmful content. When platforms “alert specific users” of videos or articles, Mr Wheeler says, “conduct becomes content” and should no longer receive Section 230 protection. Some advocates of curbed immunity distinguish between benign and destructive algorithms. “Somebody has to draw a line,” Mr Wheeler says. The question facing the justices is whether a line can be found with something to recommend it. ■

Debates in jail

Arguing behind bars

NEW YORK

A movement to teach debating skills to the incarcerated

“ANYONE WHO’s ever been in a courtroom accused of something knows that the presumption of innocence is an assumption of guilt. That’s the actual way it is,” said Domenick Crispino, bluff and jovial as he spoke from behind a lectern. He knows whereof he speaks. After the word “something” he smiled sheepishly and raised his hand: Mr Crispino, a former lawyer, spent six years behind bars.

Mr Crispino was arguing to retain cash bail, which he said helps deter crime and provides an essential incentive to get people to return to court. Whether he actually believed this is beside the point: he was involved in a debating contest on the topic of cash bail, along with another ex-inmate, against two Columbia University students, and a coin-toss determined the position he took.

Mr Crispino works with the Rikers Debate Project (RDP), a group of volunteers who have taught around 1,000 prisoners debating skills over the past seven years. The RPD arranges debates between inmates and former inmates who have taken their classes, and students; it pays ex-inmates $250 per debate. RDP began at Rikers Island, New York City’s biggest jail, but has expanded to other facilities in New York and beyond. At its pre-pandemic peak the project was teaching 12 classes in six states, including Louisiana and Texas.

Opening doors

The scheme’s goal is to develop prisoners’ critical-thinking and public-speaking skills, which will help them professionally after their release. Hashani Forrester, Mr Crispino’s partner at a debate held on February 13th at Columbia University, praised the programme for giving him “confidence” and enabling him to network.

Mr Forrester, a 41-year-old combat veteran, owns a property business with his siblings and is studying for a bachelor’s degree at New York University. Camilla Broderick, who spent eight months in Rikers and is now studying at Columbia for a master’s in social work, says the “logical arguments and framing devices” she learned have helped her in her studies. And the weekly debating classes seemed more attractive than the alternatives on offer (courses on religion and food safety).

In the end, Messrs Crispino and Forrester narrowly lost their debate to their undergraduate opponents. Six of the 11 judges felt that the students did better in covering the “flow” (a debating term for the array of arguments offered, each of which must be answered in turn). But, says Mr Crispino, a little wistfully, “it was kind of a throwback to those skills I learned years ago, which I haven’t used in a long time.”

Back to Blue

An initiative of
Economist Impact and The Nippon Foundation

THE CRITICAL NEED FOR MARINE POLLUTION DATA

Back to Blue, an initiative of Economist Impact and The Nippon Foundation, is launching a global call to action to close the marine pollution data gap

Pollution caused by human activity accumulates in the seas. Yet poor and inaccessible data means building a coherent and holistic picture of marine pollution is impossible. Plastic pollution garners headlines, but a plethora of other chemicals and contaminants—mostly unseen—are likely doing as much, if not greater, harm to ecosystems, marine life and human health. On this score society knows frighteningly little: there has been no comprehensive global effort to harmonise, collate, analyse and interpret data to build a holistic picture of marine pollution and its impacts.

Chemicals and other contaminants reduce biodiversity and damage the marine ecosystem. Ocean pollution is an economic problem too, damaging fisheries, reefs and coastal environments. A zero-pollution ocean is critical to achieving global climate-change and biodiversity targets, yet it will only be possible if policymakers, business leaders and investors have access to sufficient evidence to evaluate the scope, scale and impact of marine pollution and to take action.

Back to Blue has published a discussion paper, *The Zero-Pollution Ocean: A call to close the evidence gap*, and calls on all individuals including scientists, activists, policymakers, investors and business leaders to join the conversation about how to spearhead a co-ordinated global response to marine pollution.

Why a zero-pollution ocean?

- Restore marine biodiversity
- Conserve ecosystems
- Safeguard human health
- Preserve healthy fisheries
- Protect coastal communities
- Boost carbon sequestration

> “DUE TO THE LACK OF DATA, WE’RE NOT EVEN ABLE TO GIVE A SIMPLE ONE-PAGE SYNTHESIS OF THE GLOBAL STATUS OF OCEAN POLLUTANTS.”

Henrik Enevoldsen
Head of ocean science section
at the Intergovernmental
Oceanographic Commission of UNESCO

unesco
Intergovernmental
Oceanographic
Commission

ADVERTISEMENT

Back to Blue's recommendations:

That marine pollution—beyond plastic—be central to the agenda at the 2025 UN Ocean Conference and other major meetings, such as the United Nations Environment Assembly in 2024, with a view to raising awareness and spurring action among policymakers.

That the UN Ocean Decade framework be used to foster effective collaboration among the various agencies that collect and hold data and other resources relevant to understanding marine pollution, including (but not limited to) UN agencies, national government agencies, universities, scientific organisations and the private sector.

That a strategic plan be developed by 2025, setting out the pathway to building a comprehensive global understanding of marine pollution. This process must incorporate the widest possible range of actors from the UN system, national governments, scientific agencies, universities, NGOs and the private sector, including the technology industry.

That a diverse group of projects and initiatives—including Back to Blue—work collaboratively with scientists to raise awareness and use existing marine pollution data to inform policymakers, business leaders and the broader public.

Join the conversation

Back to Blue invites all stakeholders, including UN and government agencies, universities, scientific bodies, civil-society groups, business, investors and individuals to share their views. With your permission, we will publish submissions on our website.

Your submission can contain any information that you think is relevant. We particularly draw your attention to the following questions:

- Is there a genuine need for a global effort to address marine pollution data gaps? Why or why not?
- What would it take to support and build on existing global data-collection initiatives, governance bodies and frameworks to develop a comprehensive picture of marine pollution?
- Which organisations need to be involved to ensure success?
- How could existing bodies and frameworks be expanded not only to store data but also to communicate it to the public and decision-makers in a way that produces meaningful change?

To learn more about marine pollution, download the discussion paper, make a submission or comment on how to close the marine pollution data gap, visit **backtoblueinitiative.com/take-action-on-ocean-pollution/** or scan the QR code.

ECONOMIST IMPACT

THE NIPPON FOUNDATION

Strange things in the sky

Shoot first, ask questions later

After much excitement, only one balloon was up to no good

IT TURNS OUT that the three unknown objects shot out of the skies by American jets in successive days, after the earlier taking down of a Chinese spy balloon, were neither sent from Beijing nor from another galaxy (as some had suggested). They were probably "benign" and employed for commercial or research purposes.

They came to light after the radars America uses to detect incoming missiles were recalibrated to pick up slower-moving objects at different altitudes. The National Security Council's spokesman, John Kirby, justified the action by saying that their altitude, lower than the Chinese airship (a more accurate term than balloon), posed a "very real" threat to civilian aircraft. The Federal Aviation Administration, which has responsibility for aircraft safety, may have something to say about that.

The unidentified vehicles shot down came in various shapes and sizes. The one flying over Alaska on February 10th resembled a "small car"; the second, above northern Canada, was a "small metallic balloon with a tethered payload below it"; the last, which came to grief at the hands of an F-16 jet over Lake Huron on February 12th, had an "octagonal structure" with strings. Whether more will be destroyed is unclear. But given that the combined cost of the two AIM-9X Sidewinder missiles fired on Sunday was about $900,000, it could become a rather expensive exercise in futility.

None of this is to downplay the seriousness of the accusations the Biden administration has levelled against a People's Liberation Army espionage programme which has targeted security facilities in many countries, notably China's Indo-Pacific neighbours. On February 14th the Japanese defence ministry said that three flying objects spotted in Japan's airspace since 2019 were now believed to be Chinese spy balloons. America claims these have flown over 40 countries and five continents.

Nor is it to take lightly the diplomatic ramifications. China is still sticking to its story that the vehicle, even though its 30-foot payload was crammed with sensors and antennae, was nothing more than an unmanned weather airship that was accidentally blown off course. But as more becomes apparent about its capabilities and purpose from the examination of the wreckage now under way by counter-intelligence officers, the defensive tone has given way to aggressive bluster with hints that an American surveillance satellite might be destroyed in retaliation. On February 15th Wang Wenbin, a foreign-ministry spokesman, said China would "take countermeasures in accordance with the law against the relevant US entities that undermine China's sovereignty and security".

However, it is China that would be in breach of international law as it applies to airspace were it to attack an American satellite orbiting above the so-called Kármán Line, 100km (328,000 feet) above the Earth. Less clear is whether sovereignty applies at all altitudes below the Kármán Line, as there is no generally accepted definition. But even if there is a grey area in higher airspace (probably best defined as what you can get away with without being shot down), 60,000 feet, where China's balloon was lurking, is not remotely close to it.

The nascent attempts by both China and America to take a little of the heat out of an increasingly antagonistic relationship now look like being stillborn. The anti-China momentum in Congress has been given a further shove. The House Financial Services Committee, under Republican leadership, has prepared a 17-bill barrage aimed at isolating China's economic and financial system. Despite Joe Biden's recently expressed hope that his country and China might still find important areas in which they could collaborate, such as climate change, the hardening mood will make it difficult. There will be more weapons on the way to Taiwan and more high-level visits. The tech freeze will intensify.

The deepest mystery, since China clearly wanted at least a pause in hostilities, is why it allowed the balloon incident to happen. "The most worrying thing is what this tells us about the Chinese system's ability to think through and co-ordinate," says Nigel Inkster, a former senior British intelligence officer who is now a China specialist at the International Institute for Strategic Studies. "Most intelligence services would have worked out that this was not a great time to do something like this. Did no one ask whether this was a good idea?" ■

The culture wars

Politics in drag

DALLAS

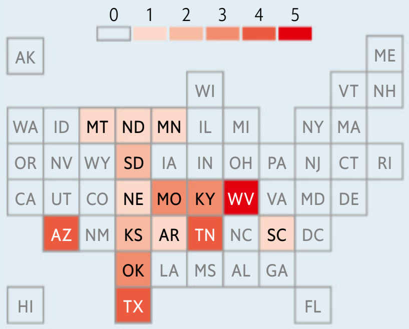
Why proposed laws targeting drag shows are proliferating

LAST MONTH "RuPaul's Drag Race", a reality show, began its 15th season on television. In it, contestants compete in costume to become the next "drag superstar" and win $200,000. Meanwhile, lawmakers across the country are engaged in a different sort of race: to restrict drag performances in the name of protecting children. At least 36 bills in 15 states are proposing rules that would make it harder for people to perform in drag (see map).

Harrumph in the heartland

United States, number of anti-drag bills, by state

At February 14th 2023



Source: Logan Casey, Movement Advancement Project

The drag drama may sound like a sideshow. But it offers a glimpse into lawmakers' political thinking, the next phase of the culture wars and the way the media (including social media) fuel outrage.

Drag is a form of entertainment in which people dress up in clothes stereotypically associated with the other sex. Long familiar at gay bars, drag has pushed more into the mainstream, in part thanks to the attention spurred by "RuPaul's Drag Race". "Drag-queen story hours", launched in San Francisco in 2015, now take place in libraries across the country. Parents take children to hear books with titles like "Be Who You Are", read aloud by people in drag. Supporters say the readings promote self-acceptance, diversity and tolerance.

In a recent cameo on "RuPaul's Drag Race", Ariana Grande, a popular singer, described drag as "the most infectious and joyous art form that there is". Conservative politicians disagree, instead finding joy in railing against it. They say drag is inherently sexual and inappropriate for minors. Critics also use drag as a sloppy shorthand for transgender people (whose gender identity does not conform with their biological sex), even though many drag queens are gay men who dress in drag to entertain, and are not trans.

▸▸

Some states, including Texas, are seeking to classify any venue hosting a drag show as a "sexually oriented business", which brings restrictions on where it can be. The goal is to reduce the number of places willing to host drag shows, says Mark Jones, a political scientist at Rice University in Houston. Arkansas is among states trying to prevent public funds from going to drag shows, in response to news that some cities have used taxpayer money to sponsor drag-queen story hours. New York City reportedly spent around $200,000 on them from 2018 to 2022.

The most extreme proposals would stop public drag shows and make it a crime for a minor to see one. In Missouri, North Dakota and Tennessee, exposing a minor to a performance would become a felony, which carries jail time. "I believe that the LGBTQ community and drag queens have the right to assembly, to organise, but they do not have the right to organise with a prurient interest in front of children," says Brandon Prichard, a legislator in North Dakota who co-sponsored the drag bill.

Protecting children is a theme of many of the proposals. "We're seeing a lot of what's old is new again in this era," says Logan Casey of the Movement Advancement Project (MAP), a think-tank that supports LGBTQ rights. "Save Our Children" was the name of a political coalition formed in the 1970s by Anita Bryant, a singer and former beauty queen, to fight incipient laws that made it illegal to discriminate against gay people. The drag proposals are also reminiscent of cross-dressing bans that flourished across America from the mid-1800s. Both share a concern not "with clothing per se, but with the power of clothing to signal gender and sexual identities…that challenge conservative religious ideologies", says Clare Sears, a sociologist at San Francisco State University who has written a history of cross-dressing bans.

The proposals have many flaws—not least vagueness. The way some bills are written, a performance by the pop star Harry Styles, a gender-fluid dresser, would become illegal, as would any historically accurate performance of Shakespeare featuring male actors dressing as women, points out Joshua Matz, a lawyer. West Virginia defines drag and performances in such a way that it would become a crime for a trans person to give a speech or sing at a wedding if even one minor was present, says Mr Casey of MAP.

"I don't think any first-class lawyer who specialises in free speech would say that these are constitutional," says Geoffrey Stone, a First Amendment expert at the University of Chicago, who thinks that "prohibiting these shows cannot be justified on any ground other than people not liking the expression they are communicating." The First Amendment protects free speech, but has narrow carve-outs for protecting people from obscenity. The test for obscenity includes whether the average person would think it appeals to "a prurient interest". Some of the proposed laws define drag as appealing to a "prurient interest" for this reason. "It's like by saying it's so, they think they can make it so," says Roberta Kaplan, a civil-rights lawyer.

The fuss over drag reflects three broader trends. One is that LGBTQ issues have become a prominent battle within the culture wars. As many as 311 anti-LGBTQ bills are pending in statehouses across the country, according to the ACLU, an advocacy group. Public approval for gay rights is at an all-time high, but the backlash is also strong. In its official materials, the Texas Republican Party now calls homosexuality "an abnormal lifestyle choice" and opposes "validating" transgender identities.

One of the biggest frustrations some conservatives have with Donald Trump is that he "didn't stand up for traditional marriage" and accepted gay marriage as a "lost" issue which the Republican Party should move on from, says Mr Prichard of North Dakota. The drag bills are a "natural and continuing outgrowth of a desire to suppress and stigmatise LGBT people and the existence of nonconformity", says Joshua Block, a lawyer at the ACLU.

Child's play

The drag bills also point to brinkmanship in Republican states. The party is looking for new culture-war issues beyond abortion. In primaries Republican politicians can speak against LGBTQ people, especially transgender ones, but voters often object to the government pushing into people's personal lives. Republicans are on safer ground, and more in line with public opinion, if they focus on children rather than LGBTQ adults, says Mr Jones of Rice. A bill to ban children from drag shows is harder for Democrats to attack than one banning such shows entirely. If Republicans can paint Democrats as the party of drag queens, obsessed with peddling gender fluidity, it is a win for them.

Lastly, the kerfuffle over drag illustrates how the attention economy operates in America. "This is just showing up at the legislatures but has already been in practice going on in conservative media for some time now," says Mr Block of the ACLU. Fox News has turned drag shows into a prime-time subject. Its most popular host, Tucker Carlson, often gives a platform to guests who rail against "sexualising" children by exposing them to drag. From June 2022 until February 2023, Fox News spent about a quarter as much time covering drag, drag queens and transgender people as it devoted to Ukraine.

On social media, meanwhile, Libs of TikTok, a Twitter account with 1.9m followers, posts mockery about drag queens and trans people. Last June, men believed to be associated with the far-right Proud Boys showed up at a drag-queen story hour in San Lorenzo, California, after Libs of TikTok tweeted about it. One man wore a shirt with an image of an AK-47 and the slogan, "Kill your local pedophile".

In November the Department of Homeland Security warned of the "persistent and lethal" threat of domestic attacks, including on gays. That was soon after a man in Colorado Springs shot up a gay bar, where a drag show was wrapping up, killing five people. According to Maxi Glamour, a drag queen who lives in Missouri and recently testified against the state's proposed bill on drag, "I'm now asked if I have security at my events, because queer people are afraid to leave their homes." ■

No minor matter?

Latin American economies

Lessons from the land of high inflation

Left-wing politicians are making worrying swipes at central-bank independence

After just seven weeks in office, Luiz Inácio Lula da Silva, Brazil's leftist president, has picked a fight with the central bank. Lula, as he is known, has called the bank's interest rate of 13.75%, a six-year high, "shameful". He has also called the independence of the central bank "nonsense", and suggested that the Senate "keep an eye" on its governor, Roberto Campos Neto, whose term ends in 2024. The president may even go further and press for the inflation target—currently 3.25% this year, and 3% for the next two years—to be raised. On February 16th, after *The Economist* went to press, the National Monetary Council, which sets the target, was due to meet. Lula's administration will also soon have the opportunity to replace two central bank governors on the monetary-policy committee, which sets the bank's interest rate.

Lula is not the only Latin American leader to put pressure on the central bank. In October last year Gustavo Petro, the newly elected leftist president of Colombia, tweeted: "Is it useful to raise the interest rate to contain inflation? No." On February 10th Jonathan Heath, a deputy governor of the Banco de México, Mexico's central bank, pushed back on Twitter against claims by Andrés Manuel López Obrador, the country's populist president, that the bank should be boosting economic growth, not just controlling inflation.

Optimists think this is just politicians, worried about the effect of high rates on their popularity, letting off steam. Pessimists worry that these actions could undermine Latin America's big economic achievement of the past few decades.

At first glance most Latin American central banks have been exemplars at combating inflation. Interest rates rose fast and high as inflation rose. Brazil moved early and aggressively, raising rates fully a year before the Federal Reserve. It increased rates from 2% in March 2021 to 13.75% today. That is one of the tightest policy stances anywhere in the world (see chart 1 on next page). This helped bring down inflation from over 12% to 5.8%, the largest drop among emerging markets.

→ Also in this section
27 222 Nicaraguan exiles
28 In bad nick

Similarly Chile raised rates higher than markets expected for 11 consecutive months, to 11.25%. On February 9th the Banco de México unexpectedly raised rates to 11% and signalled that another increase may come in March. In Colombia the interest rate is 12.75%, up from 1.75% in 2021. Peru, where anti-government protests have taken place since December, is the exception. On February 9th, after 18 back-to-back rises, its central bank stopped increasing the interest rate, now at 7.75%. In the United States "we had this debate about how transitory inflation would be," says William Maloney of the World Bank. "The Latin American central banks said: we can't take a chance on this not being transitory."

But look closer and the signs of strain are there, with two underlying causes. One is that inflation is sticky and requires sustained high rates to control. Though headline inflation is receding in most countries, core inflation, which excludes volatile components like fuel and food, remains uncomfortably high (see chart 2 on next page). Wages are rising faster than productivity, which may put further pressure on prices. In Mexico pay rises agreed upon in January averaged 11% in nominal terms, the highest in 22 years and a sharp increase in real terms. This all means it is likely that there is more pain to come.

The other problem is that some leaders appear to think that central-bank independence is now a problem. They fear that high rates dampen growth and hurt borrowers. Central-bank independence also makes it harder for these politicians to stimulate the economy, because the banks counteract fiscal expansion.

Independent central banks were once seen as one of Latin America's big achievements. In the 1970s and 1980s inflation in the region went berserk after years of government profligacy. It hit 2,500% in Brazil, more than 7,500% in Peru and over 20,000% in Bolivia. But in 2015-19 it averaged 4% across the region. Today, excluding Venezuela and Argentina, which continue to be outliers, the region's average inflation is below that of the OECD, a club of mostly rich countries.

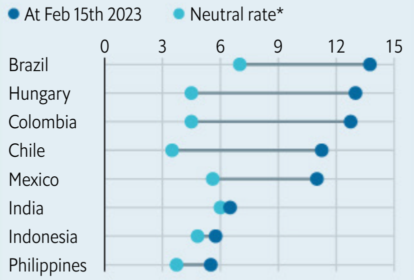
Central-bank independence was key to defeating hyperinflation. It became a consensus among the left and the right, even if Latin America's central banks became independent later than most. For example, although governments in Brazil had allowed the central bank to operate fairly autonomously since the country's return to democracy in 1985, the bank was not formally granted independent status until 2021 under Lula's predecessor, Jair Bolsonaro. According to the IMF, today the region's banks hit their inflation targets more often than their counterparts in other emerging markets.

Independence can be compromised in several ways. First, politicians can throw their weight around. The de facto autonomy of Brazil's central bank suffered during the administration of Dilma Rousseff, a Lula protégée who was president from 2011 until her impeachment in 2016. Her government pressed the bank to loosen monetary policy. Inflation soared to 10.7% and private-sector debt piled up, contributing to a disastrous recession.

Personnel changes can also make central banks more doveish. In a recent note Goldman Sachs, a bank, expressed concern that the changes to the monetary-policy committee in Brazil, because of term limits, could undermine central-bank independence if the two new directors are brought in for political reasons. By contrast Mr Petro tried to reassure investors in December by nominating Olga Lucía Acosta, a former adviser to the UN, to Colombia's central-bank board.

Leading the pack 1

Central-bank policy rates, %



*Theoretical rate at which monetary policy neither stimulates nor restricts economic growth

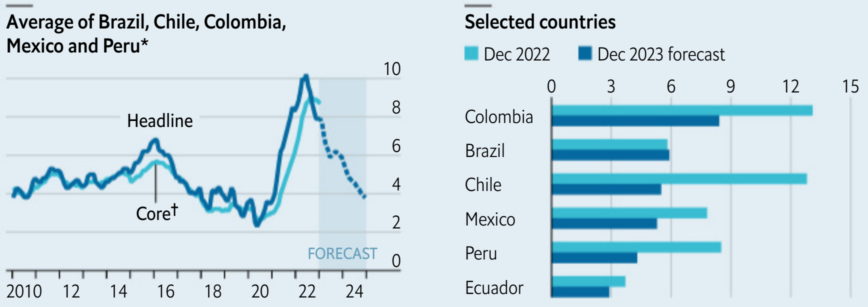
Sources: Capital Economics; Haver Analytics

A third way independence can be eroded is through constitutional changes. Gabriel Boric, the 37-year-old leftist president of Chile, has respected the independence of the central bank. But a constitutional convention he backed tried to expand the central bank's remit, and potentially weaken its autonomy. (Voters overwhelmingly rejected a final draft of this new constitution in a referendum last year.)

So far the damage remains limited. Bond yields have risen, but do not suggest that investors are panicking quite yet. Chile's central bank remains hawkish, as does Mexico's. Earlier this month Leonardo Villar, governor of Colombia's central bank, told Bloomberg that the region's monetary policies would probably remain "restrictive" for a while yet. In one survey Brazilians were less likely than most to think inflation would rise, and more likely to think their standard of living would improve. Nonetheless, "we have to be patient until we put the genie back in the bottle," says Alberto Ramos at Goldman Sachs. "And it's not going to be in 2023." ■

Sticky 2

Consumer prices, % increase on a year earlier



Source: Goldman Sachs Global Investment Research

*Weighted by GDP at purchasing-power parity †Excl. energy and fresh food

---

Nicaragua

A dictator's purge

Daniel Ortega expels 222 political prisoners from the country

NICARAGUA'S AUTHORITARIAN regime has long jailed and mistreated its opponents. So it appeared to be a cause for celebration when, on February 9th, 222 political prisoners were taken from cells across the country and put on a flight to the United States. "We are going to be able to walk freely without fear that they [the regime] are following us, persecuting us, or will kill us," says Ezequiel González, a 23-year-old student who was among them.

The range of people on the aeroplane, from students to politicians, shows just how sweeping the regime's crackdown has become. President Daniel Ortega, a former Sandinista guerrilla, and Rosario Murillo, his wife and vice-president, will do anything to stay in power. In 2018 they set thugs on protesters, killing at least 350. In 2021 they locked up all seven main opposition candidates before an election. Last year the repression extended to the Roman Catholic church. Priests who spoke out against the regime were put behind bars.

However, the release of the prisoners is unlikely to signal a change of tack by the regime, says María Lilly Delgado, a Nicaraguan journalist in exile in Miami. Soon after the plane had taken off Nicaragua's Congress stripped the 222 former prisoners of their nationality. Later that day Mr Ortega described them as "mercenaries" acting for the United States. On February 10th a court sentenced Bishop Rolando Álvarez, who had refused to get on the plane, to 26 years in jail.

Mr Ortega may hope the purge will silence those within his regime who are growing uneasy about the level of repression in the country. But it is unlikely to lessen international pressure. The United States has recently imposed sanctions on a broader range of Nicaraguans. It has also excluded Nicaragua from a friendly duty regime on exports of sugar to the United States, and made it illegal for Americans to work with Nicaragua's gold industry.

The ruling couple may have rid the country of any political opposition. But the released prisoners will organise abroad, once they have recovered from their ordeal, which included starvation. Félix Maradiaga, a former presidential hopeful who was among those deported, says his time behind bars made him acutely aware of the regime's cruelty. Few will forget that. As Mr González puts it: "In one way or another this struggle has to continue." ■

Prisons

In bad nick

LATACUNGA

Latin America's prisons are overcrowded and violent. And some are getting worse

BERTA GARCÍA looks, in her fleece, like a hiker passing through Latacunga, an Andean town 90km (55 miles) south of Quito, the capital of Ecuador. But Ms García is not here for the country's spectacular volcanoes. Latacunga is also home to a prison where 27 inmates died in riots in 2021. It was here, in a jail run by drug gangs, that her 74-year-old husband was sent after being convicted in absentia of embezzlement. He has cancer, but had to sleep on the floor in an overcrowded cell. He was beaten up. After three months Ms García got him transferred to a lower-security prison. But by then incarceration had already taken its toll. "He's very skinny, he's aged a lot," she says, as she visits the jail to pick up his medical files.

In the Americas 376 of every 100,000 inhabitants are behind bars, more than twice as many as in any other region. Historically, that rate has been pushed up by the United States, which has one of the highest incarceration rates in the world: 629 people per 100,000. Other countries are now starting to catch up. In the two decades since 2000 the prison population in Central and South America has surged by 77% and 200%, according to the World Prison Brief, a database maintained by Birbeck, University of London.

Latin America's prisons have little funding. In 2021 the average spent on an inmate in a state prison in Brazil, which has the third-largest prison population in the world, was $4,000 a year. That is about a tenth of the average spent in the United States. And the pandemic has worsened matters, increasing overcrowding and violence. Since December 2020, over 400 Ecuadorians have been killed because of gang warfare in prisons. In June last year 53 prisoners were killed in a riot in Colombia.

In a region with high crime rates, citizens have long favoured their leaders treating suspected criminals with *mano dura*, or an iron fist. The most extreme example of this is in El Salvador. In March 2022 a state of emergency was declared by President Nayib Bukele, after a spike of gang-related killings. Some 100,000 people, or 2% of Salvadorean adults, are now behind bars. The country's homicide rate has halved. Mr Bukele's approval rating is a whopping 90%, the highest in the region.

But the problem is that Latin American prisons offer little rehabilitation. Fewer than half of prisoners have access to work or education, and programmes that exist tend to be infrequent and short-term. As prison populations started to soar in the 1990s, reformist types who envisioned prisons as places for state-sponsored re-education were disappointed, says Giane Silvestre of the University of São Paulo. Instead it seemed that "prisons are just a place to put undesirables."

Few countries keep records on recidivism and different ways of measuring reoffending make them tricky to compare. But the data that exist are discouraging. In Brazil, according to a 14-year study published last year of more than 900,000 former prisoners convicted of drug crimes, violent crimes and theft, one in five ended up back in prison within a year and nearly 40% within five years. In the United States 45% of former inmates return to prison within five years, either on a new conviction or for violating the terms of their parole.

Overcrowding means that many prisons are simply cages. The World Prison Brief estimates that Brazilian and Bolivian prisons are operating at 147% and 264% of capacity, respectively. Inmates report not receiving medical care. According to the World Health Organisation, a Salvadorean in prison is 99 times more likely than the national average to have tuberculosis. Often another consequence of overcrowding is violence.

In some prisons, the authorities work in tandem with inmates. Others are run entirely by prisoners, with staff guarding only the perimeter. At the extreme end are the Venezuelan *pranes*, or kingpins. They control 46% of the prison population, while state authorities govern 11% (the rest is under mixed control), according to the Venezuelan Prison Observatory, an NGO. This is the consequence of a policy from the 2010s when Iris Varela, the prisons minister, realised that the state alone could not control prison violence. She abdicated responsibility to the *pranes*, who built *discotecas*, swimming pools and zoos.

In Ecuador, where the government says that over a third of inmates belong to a criminal organisation, there is one prison guard for every 62 inmates (in the United States, that ratio ranges from 1:4 to 1:14). Outnumbered and underpaid, they sometimes join the gangs they are supposed to control. In recent years Ecuador has been hit by a wave of murders orchestrated by gang bosses behind bars. In the first eight months of 2022, the number of homicides doubled compared with the same period the previous year. The gangs that hang bodies off bridges were "born in the prisons", says Renato Riveira, a researcher.

The Mexicanisation of a region

Some countries are trying to change. Of 25 Latin American countries, six have reduced their prison populations since 2018, according to the World Prison Brief. In Ecuador last year Guillermo Lasso, the president, announced plans to free 5,000 prisoners and hire more guards.

Some prisoners were displeased with these plans. In November, in an apparent response to the transfer of gang bosses to higher-security prisons, gangsters in Guayaquil, Ecuador's second-largest city, threw explosives at petrol stations, police stations and a hospital, killing five police officers and a civilian. Such violence may make it hard to persuade society of the value of freeing less dangerous prisoners. ■

At one extreme in El Salvador

South Asia's filthy air

Choked and gasping

DELHI, DHAKA, ISLAMABAD AND MUMBAI

Fixing pollution will require countries that hate each other to co-operate

INDIANS ARE accustomed to seeing their streets getting a lick of paint or the odd pothole being filled before a senior politician or foreign dignitary comes to town. But to prepare for a visit from Narendra Modi, the prime minister, on February 10th officials in Mumbai deployed a new tactic. They sprinkled its roads with water.

They hoped to damp down the street and construction dust that contributes to the city's pervasive smog. For much of this winter, Mumbai's skyscraper-filled skyline has been almost invisible behind a grey haze of particulate matter. On some days the Arabian Sea city's air has been worse than that in Delhi, India's more famously polluted capital. Between November and the end of January, Mumbai, the country's commercial capital, recorded 36 days with "poor" air quality, a level at which even otherwise healthy people can have difficulty breathing. This represents a grim extension of what was already one of the world's worst environmental problems.

Delhi and nearby cities on the populous Indo-Gangetic Plain, which extends from Pakistan to Bangladesh, have long had the world's filthiest air. Yet as infrastructure-building and industrialisation accelerate across the region, due in part to a post-pandemic growth spurt, the smog is spreading. According to a new analysis by the World Bank, nine of the world's ten cities worst afflicted by air pollution are in South Asia. And on February 12th, at the height of the winter smog season, only two of the ten most polluted places in India were in and around Delhi. The rest, including Mumbai, were in western India.

Earlier in the season the Pakistani cities of Karachi, also on the Arabian Sea, and Peshawar, near the border with Afghanistan, both briefly topped a global index of cities with the worst air quality. In Kathmandu, on the northern edge of the Indo-Gangetic Plain, the peaks of the snowy Himalayas that fringe Nepal's capital are often hidden by yellow-brown haze.

→ Also in this section

32 The Taliban's new canal
32 Aboriginal booze bans
34 Banyan: Modi against the media

South Asia's filthy air takes a terrible toll on the health and economic prospects of millions. High levels of fine particulate matter, known as PM2.5, burrow deep into lungs and enter the bloodstream, increasing the risk of heart and lung disease as well as strokes. Air pollution is estimated to kill over 2m people in Bangladesh, India, Nepal and Pakistan each year. Globally, it reduces average life expectancy by 2.9 years. The corresponding figure for India is five years. On the Indo-Gangetic Plain, according to a recent study, the average Indian life is up to seven years shorter due to air pollution than it would be otherwise.

A study recently published in the *Lancet*, a medical journal, estimated that in 2019 India's economy lost $37bn, or 1.4% of GDP, to pollution-related death and illness. Another study by the Clean Air Fund, an NGO, and the Confederation of Indian Industry, a trade body, calculated that India lost 1.3bn working days that year due to employees staying at home because they or their family members had pollution-linked illness. Pakistan's province of Punjab, which accounts for 60% of the country's output, has seen serious smog-related disruptions this winter; its school holidays were extended, flights diverted or delayed and motorways closed overnight.

Predictably, the poor see the worst of this. The Indo-Gangetic states of Uttar Pradesh and Bihar are among the poorest parts of South Asia—over 115m of their inhabit-

▸▸

ants live on less than $2 a day—and also the most polluted. Poor people are likelier to use dirty fuels, contributing to high levels of indoor pollution. Meanwhile, "the rich are trying to create a bubble for themselves with air purifiers," says Karthik Ganesan of the Council on Energy Environment and Water, a think-tank in Delhi.

Air pollution, which nonetheless affects rich and poor, however unevenly, is a political concern across the region. Yet its governments' mitigation efforts have mostly been ineffective. India launched its National Clean Air Programme in 2019 with the aim of improving air quality in 102 cities (later increased to 131). Four years on, only 38 are on track to hit their targets. Pollution in many of the rest, including Bangalore, Chennai, Mumbai and Nagpur, has increased. Pakistan, beset by perma-crises, is vacillating over whether to launch its own national clean-air programme. Bangladesh drafted a clean-air act in 2019 but has not passed it. Across South Asia, there has been "very little improvement despite the policies in place to improve" air quality, says Hans Timmer of the World Bank.

There are many explanations for this failure, including the difficulty of regulating industry in a region where government is weak and corruption rife. Yet the biggest reason, the Bank suggests, is that policymakers are mostly trying to abate pollution within the cities concerned, and much of it originates elsewhere.

Take the smoke that arises in India's state of Punjab every autumn when its million-odd farmers set fire to their stubble fields. It drifts eastwards, enveloping Delhi and other cities of the northern plain. Or the fug of pollution arising from the brick kilns that ring Dhaka, Bangladesh's capital. "In most cases less than 50% of the pollution is coming from the cities themselves," says Mr Timmer. In three South Asian capitals—Colombo, Dhaka and Kathmandu—less than a third of air pollution comes from within the city. Around 30% of Indian Punjab's pollution originates in Pakistan, while 30% of pollution in Bangladesh's major cities has blown in from India.

A better approach is to design and deploy controls across the far-flung zones, known as airsheds, in which air pollution circulates. It has been done successfully in Europe and China, whose capital was once as synonymous with smog as Delhi is today. Beijing's air is now cleaner chiefly thanks to the creation in 2013 of a powerful airshed-wide authority responsible for the capital, the city of Tianjin and 26 adjacent prefectures. In 2017 PM2.5 levels in Beijing were half those of the previous year.

India is trying to follow this example in and around Delhi. In 2021 it launched a pollution-control agency, called the Commission for Air Quality Management (CAQM), with responsibility for a 55,000-square-km area, encompassing the capital and parts of Haryana, Rajasthan and Uttar Pradesh. It is home to 46m people. Its constituent authorities include Delhi and four states, several central-government ministries, and various universities and NGOs. "The idea is not just to bulldoze, but to follow a practice by which everybody is taken into confidence," says M.M. Kutty, the commission's chairman.

Though many have criticised the CAQM's slow pace of progress, the early results are promising. According to official figures, Delhi's average daily concentration of PM2.5 declined in 2022, the body's first full year of operation, to 98 micrograms per cubic metre from 105 the previous year. The number of hours of "severe" PM2.5 fell from 628 to 204. Yet more significant progress, the Bank suggests, will require a major expansion of this approach.

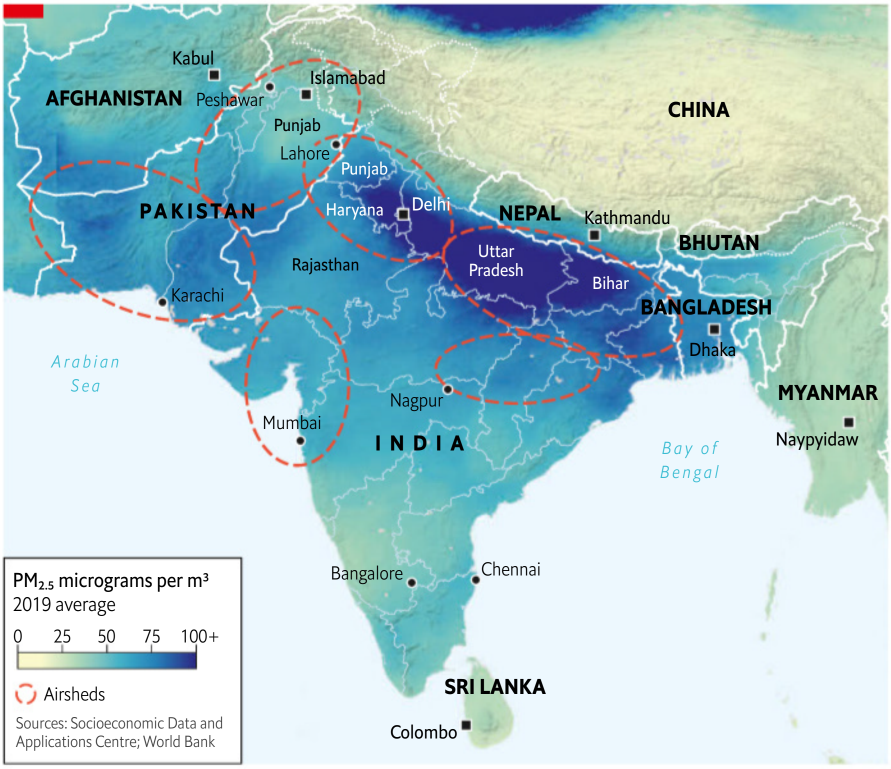
Blue sky thinking

It has identified six regional airsheds. They are vast areas, covering multiple urban, provincial and national jurisdictions. Significantly, four of the six span national borders. One stretches from eastern Iran into western Afghanistan and southern Pakistan; another covers much of northern India and western Bangladesh. According to the Bank's modelling, the more co-ordinated the pollution controls adopted in these expanses, the more cost-effective and beneficial they would be.

The ideal scenario, it suggests, would be for authorities within a given airshed to co-operate on data-sharing and policy formulation, while each working towards a locally determined target. This would allow them to prioritise relatively easy or low-cost forms of pollution control—such as regulating brick kilns—over more difficult or expensive sorts, such as closing coal-fired power stations. The Bank reckons that in this scenario South Asian life expectancies would rise, infant mortality would drop and health-care expenditure would fall. For a cost of $5.7bn, it estimates the approach could bring economic benefits worth $52.5bn by 2030.

The idea of Bangladesh, India and Pakistan—let alone Afghanistan and Iran—working together to such an extent is, the Bank's authors concede, "far from straightforward". It might almost seem absurd. South Asia is one of the most unneighbourly, least-integrated regions in the world. It is haunted by a history of war and mutual suspicion. Its cross-border linkages are meagre. Trade within the region is just 5% of its members' total trade; the corresponding figure for East Asia is 50%, according to the Brookings Institution, a think-tank in Washington, DC.

Yet if anything could begin to knit the region's divisions, perhaps the shared goal of helping its people breathe easier might. Air pollution is politically salient across South Asia and the very opposite of zero sum. The subcontinent's winds blow back and forth; none of South Asia's polluting countries and cities is permanently upwind. To seriously reduce the blight from which all of them are suffering, they will, in the end, have to co-operate. ■



Sources: Socioeconomic Data and Applications Centre; World Bank

Google

We keep more Americans safe online than anyone else

For over 20 years, we've been protecting Americans from cybersecurity threats. From phishing protections to safeguarding the websites of news outlets and human rights organizations, we're building advanced technology that raises the bar for the entire industry and makes the whole internet safer for everyone.

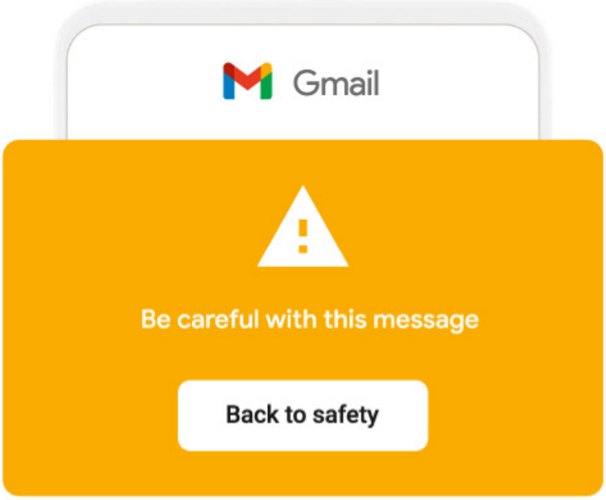
Explore how Google is building tools to keep more people safe and secure at safety.google

Safer with Google

Google

9 out of 10 cyberattacks begin with a phishing link

Gmail phishing protections were built to block ⊘ more than 100 million attempts a day



Be careful with this message

Hackers use phishing emails to try and trick people into revealing personal information. Gmail features the most advanced phishing security available, because the best way to combat large-scale phishing operations are even larger-scale defenses.

Explore how Google is keeping more Americans safe online than anyone else at safety.google

Safer with Google

will permit remote communities to opt out of the ban only if they can show a plan to manage alcohol consumption, supported by a majority of their residents.

Many Aboriginal people consider prohibition necessary. It should not be viewed as discriminatory but as "a protection for the women and children in those communities", says John Paterson, the (Aboriginal) chief executive of the Aboriginal Medical Services Alliance Northern Territory. Even so, prohibition will not fix the underlying issues of poverty and marginalisation driving Aboriginal people to drink.

Contrary to a persistent myth, their genetic disposition does not make them more susceptible to alcohol abuse; the conditions in which many live do. In Alice Springs' dry riverbed, unemployed groups from across Australia's desert interior sleep rough. Surveys suggest Aboriginal people's average household income is around half the Australian average. Almost half of young Aboriginal adults are not engaged in full-time work or education.

The federal Labor government, led by Anthony Albanese, promises to tackle the problem by spending A$250m ($173m) on Aboriginal social services, including health care. Such measures are necessary. Like the booze bans, they have previously had only limited success under previous governments, notes William Tilmouth, an elder of the Arrernte Aboriginal nation: "Everything they do is a variation of yesteryear." Given that as a child he was seized from his family and placed in a mission in the name of assimilation, that is a painful indictment. But it is hard to disagree with. After decades of interventions, the lives of Australia's Aboriginal people are getting little better and in some ways worse. ■

Banyan Modi against the media

Western countries' failure to come to the BBC's defence is predictable and pathetic

INDIA'S TAX police, says the government of Narendra Modi, had good reason to send dozens of officers to raid the BBC's offices in Delhi and Mumbai this week. The British public broadcaster is alleged to have understated its Indian profits. But nobody believes that explanation for a second—nor are they meant to.

The raid follows the BBC's airing last month (only outside India) of a two-part documentary, "India: the Modi Question". It charts Mr Modi's career-long efforts to demonise India's 200m-odd Muslims. It examines above all the prime minister's role in an outbreak of sectarian violence in 2002 in Gujarat, during his time as chief minister of the state, in which over 1,000 died, most of them Muslims. This episode, in which dozens of Muslim women and girls were raped and burned alive by well-co-ordinated Hindu mobs, has long dogged the chest-puffing Hindu nationalist leader. The BBC documentary cites an unpublished report by the British government on the violence. It describes an organised campaign of ethnic-cleansing against Muslims. It holds Mr Modi "directly responsible" for a "climate of impunity" that enabled the violence.

The prime minister is nothing if not thin-skinned. His government invoked "emergency" powers to ban the documentary in India, including on social media. When students tried to screen it at Jawaharlal Nehru University in Delhi, a left-leaning institution that Mr Modi's Bharatiya Janata Party loathes, the authorities cut the electricity. The ruling party's spokesman describes the British broadcaster as "the most corrupt organisation in the world", engaged in "hatred-fuelled work against India".

The raid was condemned by Indian free-speech groups. Fat lot the government cares. The BBC can expect a long and painful entanglement with its inspectors. Punishment by process is a favourite tactic of the Modi administration when it wants to intimidate or wear out those who dare to find fault with the prime minister or his party. In 2020 Amnesty International was forced to close its India operation after its bank accounts were frozen. Last year Oxfam India and the Centre for Policy Research, a think-tank in Delhi, suffered tax raids. Indian media outfits, journalists and activists who have offended suffer worse. Reprisals, whether carried out by the government or its enraged admirers, have included pulled advertising, detentions without trial and, for Gauri Lankesh, a journalist and critic of chauvinistic Hindutva ideology, assassination.

In the media, an army of corybantic Hindu trolls celebrates such outrages. Each is chalked up as a victory for the Hindu nation they mistakenly consider India, a land of amazing diversity, to be. As Apoorvanand, a columnist for the Wire, a news website, points out, the New-York-based short-seller Hindenburg Research would also be a target for revenge if it had operations in India. Its blistering analysis of the financial arrangements of the Adani Group caused one of India's biggest conglomerates to lose $130bn in stockmarket value. And Gautam Adani, its founder and main shareholder, is a close corporate ally of Mr Modi. Hindenburg, for the trolls, must therefore be part of the same anti-India conspiracy as the BBC, Amnesty, Ms Lankesh and the rest. Mr Adani, it follows, must be pure.

Some wonder whether Mr Modi might have crossed a line by going after the august BBC, especially in a year when India will be in the spotlight as host of the G20. They underestimate how important fighting shadowy enemies is to his political appeal. After the prime minister's many victories against his domestic critics, going after foreign ones is the logical next step.

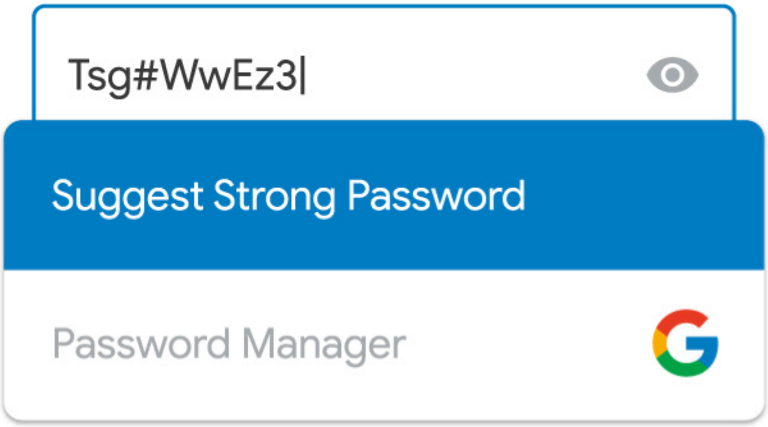
The doubters also underestimate the limpness of Mr Modi's Western allies. America, Britain and the rest may express some small concerns, from time to time, about minority rights and press freedoms in India. But what matters to them is the vast economic potential of the Indian market and their longing for an Indian bulwark in the West's struggle for supremacy with China.

Last month Britain's especially limp prime minister, Rishi Sunak, suggested he did not "agree at all" with the unpublished report's characterisation of Mr Modi. There has been no full-throated backing in London or Washington for the BBC, let alone for Mr Modi's far more vulnerable Indian victims. Fair enough, you might say; geopolitics is a rough game. But next time Banyan hears a Western leader congratulating Mr Modi on their countries' "shared democratic values", his stomach will turn.

Google

Weak passwords are the biggest threat to your online security

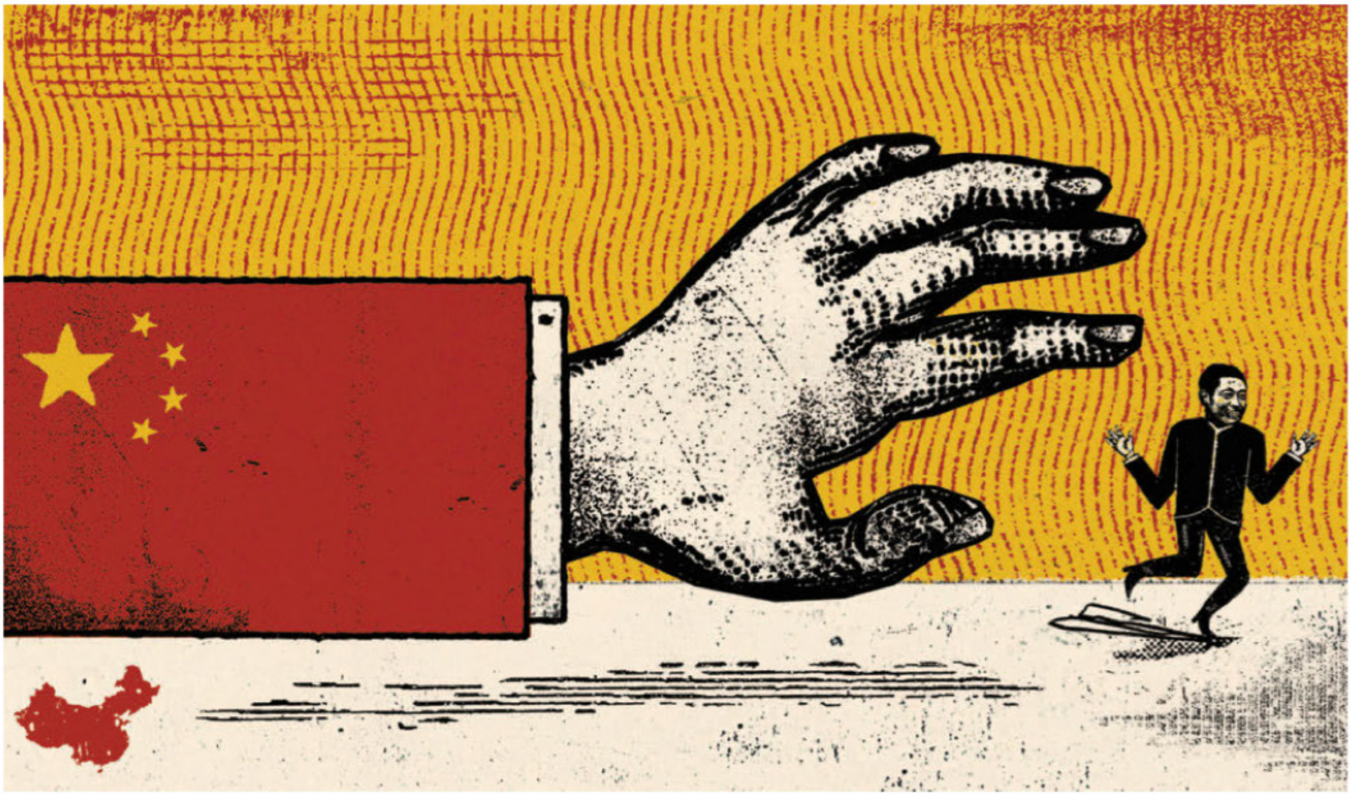
Google Password Manager was built to create and remember strong passwords for you



66% of Americans admit to using the same password across multiple sites, which makes all those accounts vulnerable in the event of a breach. Google Password Manager creates and remembers strong passwords for each site you visit and app you use, keeping you and your information safe.

Explore how Google is keeping more Americans safe online than anyone else at safety.google

Safer with Google



China abroad (1)

The long arm of the police

Under Xi Jinping, China’s coppers have been extending their global reach

AMERICA’S FEDERAL Bureau of Investigation (FBI) has a web page called “The China Threat”. It is often updated with links to news about the bureau’s efforts to counter it. Top of the list is the FBI’s investigation of a Chinese balloon that was shot down by an American fighter jet off the coast of South Carolina on February 4th (see United States section). But if you look closely there are plenty of other startling areas of Chinese subterfuge and surveillance. Among the most surprising is China’s pursuit of fugitives beyond its borders. The scale of activity globally is now staggering—involving many thousands of alleged miscreants—and it is increasingly straining relations with the West.

Police forces everywhere try to enlist the help of counterparts in other countries in nabbing those on the run. But China often skirts formalities. Last October Christopher Wray, the FBI’s director, accused China of “interfering with our independent judiciary, violating both our sovereignty and the norms of police conduct to run lawless intimidation campaigns here in our backyard”. Since 2020 the FBI has charged 16 people, most of them Chinese citizens, with involvement in such activity. “We’re seeing the Chinese government resort to blackmail, threats of violence, stalking and kidnappings. They’ve actually engaged criminal organisations in the US, offering them bounties in hopes of successfully taking targets back to China,” said Mr Wray last year.

Many of the cases that the FBI and other Western law-enforcement agencies worry about involve a technique that China calls *quanfan*, or “persuading to return”. It is a euphemism for measures ranging from putting pressure on relatives in China to the deployment of goons to threaten suspects in the countries where they live.

Since Xi Jinping took over as China’s leader in 2012, the use of *quanfan* has soared. There are two main reasons why. The first is Mr Xi’s war on graft. It has prompted the Chinese police to turn their attention overseas, thousands of corrupt officials having fled abroad. The second reason is expediency. Browbeating suspects into getting on a plane back to China can be a lot easier than enlisting police in other countries to help. Western governments have become increasingly alarmed by what they see as the infringement of sovereignty and abuse of people’s rights that *quanfan* often entails.

Launched by China in 2014, Operation Fox Hunt is a worldwide effort to repatriate people it describes as corrupt officials (the FBI says many are also wanted for political reasons). It was expanded in 2015, under the name Operation Sky Net, to cover those involved in financial crimes as well. Sky Net has secured the capture of well over 10,000 people, according to official reports. Not all of them were abroad at the time. Official data are patchy, but a report by Xinhua, a government news agency, gave a breakdown for 2018. It was a typical year, with 1,335 people seized under Sky Net. Of those, more than 29% were apprehended at the border or inside China (some fugitives return to China under new identities). Xinhua’s figures showed that of those targeted overseas, *quanfan* techniques were used in over half of cases.

In several Western countries, alarm has

→ Also in this section

37 Overseas police stations
38 Effective propaganda
39 Chaguan: Taiwanese heart and minds

grown following a report last year by Safeguard Defenders, a human-rights group based in Spain, that Chinese police have been setting up numerous "service stations" abroad (see next story). Chinese officials say they are staffed by volunteers from ethnic-Chinese communities. Their declared role is to help Chinese expatriates talk to police in China about bureaucratic matters such as the renewal of their Chinese driving licences. But some of them have been involved in *quanfan* operations, says Safeguard Defenders (China has dismissed such reports as "malicious hyping"). The Dutch and Irish governments have ordered the closure of offices with alleged links to Chinese police in their countries. In November Mr Wray said he was "very concerned" about the stations. One in New York has been raided by the FBI.

In 2020 the FBI brought its first case against people in America for crimes related to Operation Fox Hunt. Indictment papers against them and others who have since been arrested for similar offences accuse China of covertly sending government agents to America to carry out Fox Hunt operations. If proven, the charges would suggest that these agents like to use a variety of surrogates to do the dirty work of spying on, harassing and threatening fugitives. People recruited to help may include private detectives, relatives and friends of the target, as well as Chinese expatriates keen to show loyalty to the Chinese Communist Party.

Fishing for fraudsters

In the past two years, China has been using *quanfan* techniques against a new type of Chinese criminal abroad: scammers who use telephones or the internet to con people in China out of money. The numbers targeted are far greater than those in the sights of China's anti-corruption police, and the methods used to secure their return more overtly brutal.

Between April 2021 and July last year about 230,000 people suspected of transnational cyber and telecoms crimes were "educated and persuaded to return to China", according to state media. In the first nine months of 2021 *quanfan* secured the return of 54,000 people just from northern Myanmar, a notorious hotspot for cyber and telecoms crime.

Police in several parts of China have threatened draconian measures against family members of those staying in, or returning from, blacklisted areas abroad who fail to co-operate with investigations. In July the authorities in Wenchang, a city in the island province of Hainan, said the children of suspects would not be allowed to attend any kind of school in Wenchang's main urban area. Suspects' spouses, parents and children would be stripped of health-insurance benefits for major medical treatments. None of their direct relatives would be allowed to work for the state. In many places officials have spray-painted the homes of suspects' relatives with words such as "fraudster's family".

In Donghai county on China's eastern coast, the local police have offered leniency to suspects who return in the next few days from countries that are notorious as bases for scamming. They list Cambodia, Laos, Malaysia, Myanmar, the Philippines, Thailand, Turkey and the United Arab Emirates. After March 1st anyone coming back from those countries will face "severe punishment". Penalties will include cancellation of household registration, which can render a person stateless, the freezing of bank accounts and the banning of their children—if still in China—from attending expensive schools. Those who have merely violated immigration laws in any of those countries will also be hit. Donghai's police apparently assume that just being present in the specified countries without the right paperwork is evidence of involvement in transnational crime.

Unlike America, most of these countries (plus Indonesia, which is named by some governments in China as another scamming hotspot) have close ties with China, including its police force. But China clearly is not content to wait for them to shut down the scammers' operations by themselves. Online and telephone fraud causes huge public resentment in China—probably more so, day to day, than corruption. So local governments, with prodding from Beijing, are vying to show their toughness with sweeping sanctions against suspects' families at home.

Even in China, murmurs of discontent with *quanfan* methods occasionally surface. Commentary has circulated online calling the punishment of relatives "guilt by association". Some Chinese legal specialists have questioned the way that police make offers of leniency to those who return: how can they pre-empt what courts will decide? Why should *quanfan* targets be treated any differently from those who turn themselves in to China's police without having fled abroad? In an article in 2021 two scholars from Jilin University warned that pressure on police to achieve success in the repatriation of fugitives could easily lead to the use of "inappropriate" methods, including "threatening and terrorising" suspects and putting pressure on their relatives. Such behaviour, they wrote, had affected China's "rule-of-law image" abroad.

It is unlikely, however, that China will try a different approach. There are no others available that achieve such results. The West's growing distrust of China is dimming prospects for better co-operation. As a senior American law-enforcement official put it in 2020, China's fox hunters are becoming the hunted. ■

China abroad (2)

Your driving licence, madam?

How much of a concern are China's overseas police stations?

A MAN SITS behind a desk in an estate agent's office on a busy street in Hendon, a north-western suburb of London. He seems irritated by the arrival of yet another journalist wondering whether this small, plain space—typical of high-street property firms—may have links to the Chinese police. It does not, he insists. He says the first he heard of allegations that it might was late last year, when a human-rights group based in Spain claimed that local police in China had set up dozens of "service stations" abroad, including in America, Britain, Canada and France. The address in Hendon was listed. So was that of a food-delivery business in south London and a restaurant in Glasgow.

The human-rights group, Safeguard Defenders, says there are at least 102 such centres in 53 countries. Like several Western governments, Britain's has expressed alarm. In late December, the property agent says, British police visited his office to ask about the matter. In New York the FBI searched an office used by a Chinese community organisation. Several other countries say they are also investigating.

The information from Safeguard Defenders draws on numerous reports circulated in China, including on the websites of state-owned media and local governments. They describe how police in three municipalities and one county in the provinces of Jiangsu, Zhejiang and Fujian have

Don't worry, he's in Shanghai

opened service stations abroad since 2016.

The reports say the centres are run by ethnic-Chinese residents of the countries concerned and are aimed at helping Chinese abroad with paperwork such as registering marriages with the Chinese authorities and renewing Chinese driving licences. The reports say the bureaucracy is conducted by police in China via video link. The Hendon address is one of 30 listed in a report by *China Youth News*, a Communist Party-controlled newspaper in Beijing. The addresses cover 21 countries and are identified as those of police service stations. The newspaper said the list was issued by police in Fuzhou, the capital of Fujian, who gave a news conference in January last year to announce these overseas services.

There are two main questions being asked by Western governments. First, would the stations' work, even if it is as limited as China claims, violate diplomatic conventions? The other is whether the stations may be breaking other laws, such as by harassing or threatening people who are wanted, or disliked, by the Chinese authorities. (There has been no public allegation of such activity in Britain involving Chinese stations: people at the three listed addresses deny providing services for China's police.) A spokesman for the Dutch foreign ministry said China had not informed his government about the centres "so that makes them illegal to begin with".

Safeguard Defenders has found reports in China's media linking three stations in Europe—in Belgrade, Madrid and Paris—with efforts to persuade suspects to return to China. Police in Nantong, a city in Jiangsu, said last year that stations they have set up abroad have helped with the return of 80 suspects. They have not said where the fugitives were living.

Even if the stations were commonly expected to provide such help, their operations would probably focus mainly on Chinese expatriates from the Chinese jurisdiction to which they are linked. They would be unlikely to have the kind of social or business connections that would enable them to keep tabs on people from other parts of China, especially ethnic minorities such as Uyghurs or Tibetans. But among 1.7m China-born immigrants in Europe, people from Wenzhou and Qingtian—two of the jurisdictions with stations abroad—form the majority.

With such attention now focused on the stations, Chinese officials may become more cautious about using them, particularly in the West. But even if police in China had hoped the centres would play a big role in the pursuit of fugitives or monitoring of dissidents, shutting them might make little difference. Chinese officials cultivate close ties with community leaders in the Chinese diaspora—they have many contacts they can turn to for help. ■

Propaganda

America bad, China good

BEIJING

Chinese messaging abroad may actually be effective

"EXPERTS LAUD merits of China's democracy," read a headline in one of China's state-owned newspapers last year. "War-addicted West must stop dreaming of global domination by force," went another. The propaganda churned out by the Communist Party isn't very subtle—or accurate (China does not hold many elections and it tacitly backs Russia's unprovoked invasion of Ukraine). But when directed at foreigners, China's messaging is surprisingly effective, suggests a new study by political scientists at Harvard, Yale and the University of Groningen (in the Netherlands).

The authors surveyed around 6,000 citizens of 19 countries. Participants were split into four groups. The first was shown Chinese propaganda, the second was shown messaging from the American government, the third got a bit of both and the fourth was a placebo group. Before and after watching, participants were asked about the economic and political models of America and China.

Support for the China model increased substantially among those who watched Chinese state media. By the end of the study, a majority of people who viewed such messages said they preferred China's form of government to America's. The American propaganda had an impact, too, but less of one. In the group that watched videos from both countries, people moved towards China.

The Chinese videos do not seem to have convinced people that the country is democratic. But they strengthened perceptions that the Communist Party delivers growth, stability and competent leadership. In "an era of democratic backsliding", audiences put considerable weight on these factors when assessing political systems, say the researchers. The study was carried out before a recent wave of covid-19 killed hundreds of thousands of people in China.

According to estimates, President Xi Jinping gives his propagandists $7bn-10bn per year to "tell China's story well". A big part of this effort is China Global Television Network (CGTN), the state media company behind the videos used in the study. It has dozens of foreign bureaus broadcasting in five languages.

The study showed that the CGTN videos were particularly persuasive among audiences in Africa and South America—two places where China's state-media efforts are being ramped up. According to annual surveys by YouGov, a British pollster, and the University of Cambridge, there is increasing support for China in countries such as Egypt, Kenya, Nigeria and Mexico.

The opposite is true in Britain, France, Germany and America, where it is easy to dismiss Chinese propaganda. Last year Xinhua, China's state news agency, produced a James Bond spoof video mocking Britain's spy agency, MI6. Thanks for the "free publicity", replied the MI6 chief in London. But China's intended message seems to be resonating elsewhere.

The China's Great and Terrific Network

Chaguan | Hearts and minds

A Buddhist master's death robs China of a champion in Taiwan

When China's Communist Party detects a chance to woo hearts and minds, it is ready to send its cadres to incongruous places. On February 12th such a mission brought dozens of senior officials to the mist-shrouded Dajue Temple, on a wooded hilltop in rural Jiangsu province. Despite the vows of atheism that bind all party members, the officials bowed their heads alongside dark-robed monks and nuns in joint homage to Master Hsing Yun, the founder of a Buddhist order with many followers on both sides of the Taiwan Strait. He died this month, aged 95.

Once, Hsing Yun's faith made him an enemy of the Chinese revolution. With other monks and millions of fellow mainland refugees, he fled to Taiwan after the defeat of the American-backed Nationalist regime in 1949 by Chairman Mao Zedong's Red Army. Later, the Cultural Revolution saw fanatical Red Guards ransack the Dajue Temple, where Hsing Yun began his monastic life. From his place of exile in Taiwan, the monk began to amass followers, eventually recruiting millions with a vision of Buddhism that emphasises practical acts of charity over esoteric theories. By the late 1980s his fame brought invitations to the mainland and meetings with leaders in Beijing. Soon afterwards, though, he was banned from China for several more years for helping a high-ranking official defect to the West after the student protests of June 1989.

In the past 20 years one element of Hsing Yun's teachings came to trump all others for party bosses in Beijing: he saw Taiwan as part of China. He talked of using Buddhism to rebuild ties of faith and kinship across the Taiwan Strait that civil war broke. In 2009 he told the World Buddhist Forum that "Taiwanese are all Chinese." To sidestep Communist Party bans on proselytising, this charitable-but-canny monk built colleges and libraries in China—and eventually restored the Dajue Temple—in the name of promoting traditional culture, not religion.

For party leaders in Beijing, securing control over Taiwan is their version of a sacred mission. Their strategy involves hearts and minds, and starts with making China vastly stronger than Taiwan, economically and militarily. As a result, it is hoped, many islanders will want to be ruled by Beijing, with a controlled dose of autonomy under the "one country, two systems" formula. Others will understand that defying China for ever—whether by trying to break away or by repeatedly electing the island's current ruling party, the pro-independence Democratic Progressive Party (DPP)—will bring economic disaster and even attack by the People's Liberation Army. Alas, to a growing number of Taiwanese, that hybrid appeal sounds unhappily like: "Come home to China, or China will hurt you." It helps not at all that Hong Kong, another territory promised "one country, two systems", has seen its Western-style freedoms snuffed out in the name of national security.

Hsing Yun will not be easily replaced. His charitable works earned him respect that bridged Taiwan's bitter partisan divides. His funeral on the island was attended by President Tsai Ing-wen of the DPP and by the head of the opposition Kuomintang, heirs to the Nationalists who lost China in 1949. At the same time, the monk's death was mourned by the Communist Party in Beijing. In all, he met three party chiefs, including Xi Jinping, who in 2014 assured Hsing Yun that he had read all the books the monk had previously given him. The Buddhist master responded with a near-benediction, praising Mr Xi's "Chinese Dream", a pledge of restored national greatness and prosperity.

Hsing Yun's power to unify did not survive his death. China tried sending a delegation including serving and retired officials to his funeral in Taiwan, calling their mission private and humanitarian so it did not need permission from DPP authorities (with whom China's government refuses to speak). When Taiwan denied travel permits to 12 of the group, the Chinese delegation headed to Jiangsu and the Dajue Temple for their own ceremony, accusing the DPP of "politicising" Hsing Yun's death. Sounding a touch political itself, the Taiwan Affairs Office of China's State Council urged "all Buddhists in Taiwan to carry on the last wishes of Master Hsing Yun" by striving for "national reunification".

If love fails, try fear

The mainland memorial drew sincere followers of Hsing Yun, too. Chaguan was at the Dajue Temple on February 12th and met some of them. Several of these Chinese Buddhists displayed unusual empathy for ordinary Taiwanese. But they were fatalistic about the island's future. A young believer from a nearby city recalled studies in Hong Kong, including an academic exchange on Taiwan. "I'd say 80-90% of Taiwanese people believe that Taiwan should follow the Western model of democracy," he reported. "Those who identify as Chinese are more people of Master Hsing Yun's generation." Full-scale war would be disastrous, said the 30-something. But if the DPP wins again at the presidential election in 2024, he called a smaller conflict within eight years "very likely".

A retired businessman had driven from Shanghai to pay his respects. He described a spiritual crisis in Chinese society, leading to more interest in religion. He called party officials corrupt liars, growling: "People don't want to hear about communism. 'Serve the people'? It's all fake. What about covid? So many old people died." He scorned those who call for invading Taiwan, asking: "Why would you 'liberate' people who are living better lives than you?" Yet he also deemed Taiwan too weak to ignore the Communist Party, urging islanders to take whatever autonomy they can get. "A small country wanting independence? That won't work."

It is a sobering thought, but China's rulers might settle for a Taiwanese population with a similar mix of views, combining distrust of the Communist Party with a bleak calculation that it is too strong to resist. Hsing Yun and his ilk are passing away. Mr Xi's China is increasingly quick to use threats to sway the island. From now on it seems that Taiwanese minds, not hearts, are the prize. ■

AVAXHOME -

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site

AVXLIVE.ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open https://avxlive.icu

Nigeria's election

The world's toughest in-tray

ABUJA, AKURE AND YOLA

Whoever wins Nigeria's presidential election faces a staggeringly difficult task

"OBI, OBI, OBI" chants the bouncing crowd, fists in the air, as Peter Obi strides into a campaign rally after unexpectedly taking a lead in the race to become the next president of Nigeria. The outcome of the election, scheduled for February 25th, will reverberate far beyond Nigeria's borders. A free and fair vote in the continent's biggest democracy would send a telling signal across Africa, where freedom is in retreat in a number of countries after a spate of coups, rigged votes and the abandonment of presidential term limits.

The stakes in this race are especially high for Nigeria, too. Africa's biggest economy—and home to roughly one in six Africans—risks sliding into ungovernability. It is not a failed state, but large parts of the country are failing, sending instability spilling over its borders and dragging down the region's economy. This is because Nigeria has been misruled by the inept and sometimes venal administrations of the two parties that have alternated in power for more than two decades: the All Progressives Congress (APC) and the People's Democratic Party (PDP). Now, with the surprising rise of Mr Obi, a third-party candidate has emerged who actually stands a chance of taking the top job (see chart on next page) for the first time since the restoration of civilian rule in 1999.

Mr Obi has been able so rapidly to challenge a two-party system largely because he offers a very different sort of politics. For decades in Nigeria politicians have sought office by stoking ethnic, religious and regional divisions. The whispered promise to voters has been: back candidates from your own group, and they will grab a bigger portion of the country's oil wealth and share it with you.

→ Also in this section
43 Israel's legal convulsions
44 Syria after the earthquakes

The candidates of the two main parties, Bola Tinubu of the ruling APC and Atiku Abubakar of the PDP, are straining to turn out the vote among their ethnic and religious bases. Mr Obi, by contrast, has reached across the country's main divides, holding rallies in his opponents' heartlands (focusing on Lagos, the commercial capital and Mr Tinubu's stronghold, in particular) and urging voters to base their choice on character and track record.

His own record as a two-term governor of Anambra state is encouraging, though not unblemished. Anambra's score on the UN's Human Development Index (HDI), which looks at indicators including income, education and life expectancy, was falling when Mr Obi entered office in 2006. It bottomed out by 2008, with Anambra ranked eighth among Nigeria's 36 states. At the conclusion of his second term he left the state with a fiscal surplus and it was ranked third in Nigeria on the HDI.

On policy, his economic instincts lean towards liberalism, perhaps because he was born into a family of retailers and made his own money through an importing business, as well as investments in banks. He promises to ease trade restrictions; liberalise, at least in part, a convoluted system of exchange-rate controls; and restore the independence of the central bank, which was eroded during the two terms of the outgoing president, ▸▸

Muhammadu Buhari. Critics point out that Mr Obi's name came up in the Pandora Papers, a large leak of data on offshore holdings of politicians and others around the world. He concedes that he erred in failing to declare his ownership of an offshore company, but says that he made his money legitimately and before he entered politics. He brings up the allegations unprompted and offers statements from his bank to try to prove the money's origin.

Mr Obi's admission and offers of transparency into his affairs are in stark contrast with his two main rivals, who have both refused to offer more than careful denials of wrongdoing when presented with questions about their own probity. Mr Abubakar is a tycoon who started his career as a customs official. In 2010 a Senate committee in America said he was implicated in the transfer of $40m in "suspect funds" to that country. (He denies wrongdoing.) Some of Mr Tinubu's assets were frozen in the 1990s by the American government, which said it had probable cause to believe the money was linked to drugs. Mr Tinubu, who has also denied wrongdoing, reached a settlement with the American authorities whereby he agreed to forfeit $460,000.

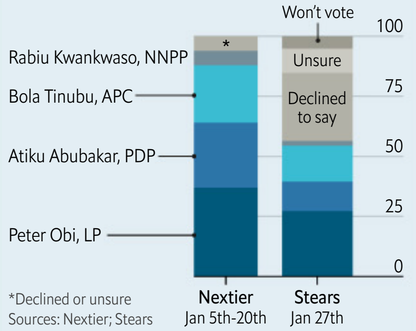
Mr Obi stands apart from the two main-party candidates in other ways, too. He is an energetic 61-year-old, who seems intellectually open. His campaign events include town-hall meetings where he encourages voters to ask tough questions. By contrast Mr Tinubu, a frail 70-year-old who has skipped several big events, recently caused ructions at Chatham House, a think-tank in London, when he declined to answer any questions, deflecting them to people on his staff. His manifesto consists largely of platitudes ("our cities and towns will witness a level of industrial activity unprecedented in our nation's history") spiced up by senseless proposals. It argues, for instance, against gathering more taxes, even though collection is lamentably low. Between 2015 and 2020 the government-revenue-to-GDP ratio was consistently in the bottom five in the world.

Mr Abubakar (76) is indelibly linked with the failures of the past two decades. He was vice-president for two terms from 1999 and has since flip-flopped in his allegiance between the ruling and opposition parties of the day, depending on which might offer him a run at the top job. On economic policy his campaign proposals seem plausible. Instead of bromides, he recognises that Nigeria will have to take some bitter medicine. His manifesto states that the tax-to-GDP ratio will need to rise from about 8% today to 20% by 2030. He also promises various business-friendly reforms, including privatising state-owned companies, though critics fear the process could lead to the enrichment of well-connected cronies. Sometimes he appears ambivalent about markets: his plans to stimulate local manufacturing, for instance, include taxing imports and giving bungs to exporters.

Hanging in there

Nigeria, presidential election voting intention

Selected polls, 2023, % responding



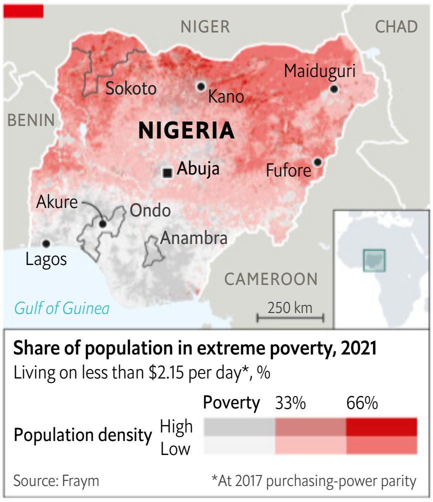
*Declined or unsure

Sources: Nextier; Stears

Whoever wins the election will inherit a splitting economic headache bequeathed by the outgoing president, Mr Buhari. Growth has been anaemic, annual inflation rose to 21% in December and Nigerians are poorer, on average, than they were when he took office in 2015. "A rational human being would not want power at this time in this country," says Jibrin Ibrahim of the Centre for Democracy and Development, a think-tank in Abuja, the capital.

Flashing the cash

Last year the government, in effect, burnt almost $10bn (2.2% of GDP) subsidising the retail price of petrol. This money could have been far more productively invested in other areas, such as improving education, health or infrastructure. At a fixed price of 185 naira ($0.40) per litre, subsidised petrol sells for so much less in Nigeria than in neighbouring countries that criminal syndicates routinely smuggle it across borders to get higher prices, producing shortages and days-long fuel queues at home. Crude oil itself is also stolen on an industrial scale, especially when prices are high. As energy prices boomed last year, so did the cost of the subsidy. After paying it, the government did not receive a single dollar in oil revenues.



Share of population in extreme poverty, 2021

Living on less than $2.15 per day*, %

Source: Fraym

*At 2017 purchasing-power parity

Another avoidable blunder has been mismanagement of the naira. Mr Buhari has steadfastly refused to let markets decide its value, so the central bank maintains multiple rates and limits imports in an effort to support it. The black market sets its own, very different rates. That hobbles manufacturers who struggle to bring in what their factories need, fuelling inflation, and invites corruption in the allocation of scarce dollars. The central bank's latest gaffe was to try to replace all existing bank notes with new ones in just a few months. The plan was suspended by the Supreme Court on February 8th after banks and ATMs ran dry, leaving millions of people unable to change their money just days before the deadline.

All three candidates promise to scrap the ruinous petrol subsidy and reform the exchange-rate system (though none seems willing to let the naira float). Yet any new president will struggle to take on the vested interests that profit from the current system. "If it were easy to get rid of the subsidy somebody would have done it by now," observes Mary Beth Leonard, the American ambassador.

Nor will it be easy to increase the amount of revenue the state raises. "Nigerians got told and believed the lie that we are a very rich country," says Ben Akabueze, the head of the budget office. And because corruption is so rife, "people generally don't feel any moral obligation to pay taxes", Mr Akabueze concedes.

Without an urgent change of direction, the government will soon run out of fiscal road. Mr Buhari's government has run up such vast debts that servicing them devours about 80% of government revenues. Many bright young Nigerians have had enough. "Nigeria's biggest export these days is human talent," quips Eric Idiahi, a venture capitalist. This makes it harder to deal with many of the deeper problems afflicting the country. Even before covid-19, at least 60m Nigerians were living on less than the equivalent of $2.15 per day, many of them in the north (see map).

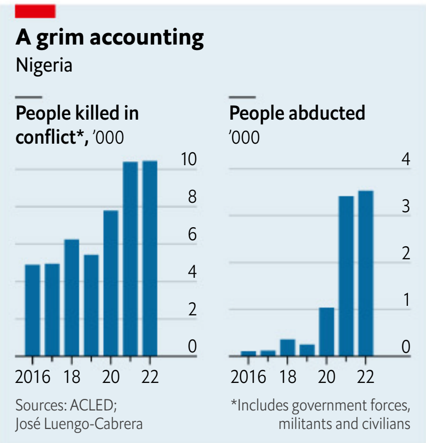
The pandemic, and food-price inflation caused by Russia's invasion of Ukraine, have added to the misery. In November the government released results of a survey showing that 133m people (63% of the population) are "multidimensionally poor" on an index that considers not just income but also such things as housing, health care and education. This, too, showed much greater poverty in the north (reaching 91% in Sokoto state) than the south (27% in Ondo, near Lagos).

Poor schooling in the north is particu- ▸▸

larly worrying. It could further entrench poverty by leaving youngsters unprepared to move into more productive jobs than herding cattle or tilling the soil, as many of their parents do. It also contributes to violence and instability. A report this month by the UN Development Programme found that people joining jihadist groups in Africa are more likely to be poorly educated than those who do not. "All else being equal, an additional year of schooling reduces the likelihood of voluntary recruitment by 13%," it found.

Economic infrastructure is dire, particularly in the north. All three presidential candidates casually promise to promote industrialisation. Yet it is impossible to run factories in the dark. The whole of Nigeria consumes only about as much electricity as San Antonio, a mid-size Texan city. Almost half of Nigerians—most of them in the north—do not have access to any electricity at all. Even where there are power lines in the south, blackouts are so frequent that many factories have to run expensive diesel generators. Bad policies play a role. Electricity tariffs are kept artificially low by the government, so utilities lose money and investors in private power plants are put off.

Poverty, unemployment, poor services and bad schools all stoke at least four overlapping security crises. In large parts of the north-east jihadists from Islamic State West Africa Province and Boko Haram roam with alarming freedom, killing and "taxing" civilians. In the north-west heavily armed criminal gangs, known by locals as bandits, sweep into villages, killing and kidnapping for ransom. In the south-east increasingly violent Igbo ethnic separatists are trying to reignite the dream of an independent Biafra. And across much of the country clashes between nomadic, mostly ethnic-Fulani herders and sedentary farmers over access to land for grazing regularly spiral into bloodshed. Last year about 10,000 people were killed in violent conflict (see chart).


A grim accounting
Nigeria

Sources: ACLED; José Luengo-Cabrera
*Includes government forces, militants and civilians

Perhaps most horrifying for ordinary Nigerians is an explosion of kidnappings for ransom, targeting everyone from commuters to classes of schoolchildren. Not even those running the country are safe. One senior APC staffer was seized in Abuja, the capital. "They kept telling me we're doing this because we cannot feed our family," he recalls. He was lucky because he managed to loosen the ropes tying him down. "That was when I ran," he says.

These crises will be fiendishly hard to solve, in part because they overlap: farmer-herder clashes in the south-east fuel separatist anger; links between jihadist groups and gangs of bandits appear to be growing; and those fleeing one crisis may find themselves in the middle of another. Take Abdulhai Abubakar, a father of three in a refugee settlement in the north-east. He and thousands of others fled Boko Haram in 2015 and hired land to cultivate. Yet they must also pay vigilantes to protect their farms from nomadic herders. If not, he says, they would "lose everything". In fear, Mr Abubakar has now given up farming.

Heading towards a crossroads

The three presidential candidates promise to give the security forces better equipment and technology. Mr Abubakar and Mr Obi say they would devolve more police powers to the states, a sensible reform that state governors have long demanded. Mr Tinubu, meanwhile, offers vacuous proposals such as one to create new police units with special forces to "seize the strategic and tactical initiative", even though Nigeria already has a number of special units, some of which have been accused of brutality and extortion. Some proposals seem to be unmoored from reality. Mr Abubakar, for instance, says he will hire a million extra officers (the force has about 370,000 now), but does not explain how much this will cost or how the government will fund it.

Guess who?

Nigerians, for their part, seem to like what they see of Mr Obi. The most recent polls by Stears, a data firm in Lagos, put him on 27%, with Mr Tinubu on 15% and Mr Abubakar on 12%. But some pundits argue that these polls are unreliable, because almost 40% of respondents decline to say who they will vote for or say they are unsure (other polls show fewer undecideds). Many still think the winner will be Mr Tinubu, who has deep pockets and the backing of an incumbent party to get out the vote.

Moreover, Mr Obi faces real obstacles to winning power. Despite his efforts to campaign on character and competence, religion and region will probably still play a big role. Mr Obi, a Catholic from the south-east, may struggle to win votes in the populous and mostly Muslim north. He could do worse than polls suggest, especially if turnout is low.

To secure outright victory any candidate would need not only to win the most votes nationwide, but also at least 25% of votes in two-thirds of Nigeria's states and the capital. If, as polls suggest, Mr Obi were to win the most votes nationally but not pass the 25% threshold in enough states, the election would go into a run-off for the first time. This would have to be held within 21 days and would pit the candidate with the most votes nationally against the candidate with a majority in the most states.

No matter who wins, says Abba Lawan, a father of eight in a displaced-persons camp in Fufore in the north-east, "we wish him well." But this is a country where losers have often refused to accept defeat and whipped up violence. Elections in Africa's biggest economy and democracy are always consequential. In the vote next week the stakes could not be higher. ■

Israel's judicial reforms

The day of judgment

DUBAI AND JERUSALEM

The battle over the government's legal reforms reflects profound and growing divisions within Israel

"ZION SHALL be redeemed with judgment." The words of the prophet Isaiah are quoted by Simcha Rothman, chairman of the law committee of the Knesset, Israel's parliament, at the start of each of its meetings. Mr Rothman is in charge of pushing through a radical overhaul of the country's judicial system. On February 13th the committee voted in favour of the first tranche of the changes as nearly 100,000 Israelis demonstrated outside the Knesset.

The leaders of those protests cite the same prophecy. And both sides claim the same goal: saving Israel's democracy. Since Binyamin Netanyahu's latest government took power in December 2022, Israel has been engulfed by a toxic row over the powers of the fiercely independent Supreme Court. Supporters of the reforms argue that, after decades of a "judicial dictatorship" that has imposed its own left-wing values, they would restore democracy. Opponents say they threaten Israel's democratic nature and risk introducing majoritarian rule. But it is increasingly clear that the conflict is about more than the role of the country's judges. The two sides are fighting over different visions of Israel.

The government is right to point to flaws in the country's judicial system. The balance of power between the court and parliament is unclear. Israel has no formal constitution. In that vacuum the court has become ever more activist. In the 1990s it deemed a series of "basic laws" passed by the Knesset, which establish rights, to be quasi-constitutional in weight. It has since dismissed various pieces of legislation on the basis of narrow and controversial interpretations of those laws.

But the government's agenda goes beyond a redress of power. Under its plans, the Knesset would in nearly all cases be able to override Supreme Court rulings. The court would no longer be able to nullify government decisions on the basis of "reasonableness". The government could stack the judicial appointments committee with government representatives.

If they pass, the reforms would remove nearly all checks and balances on the government. Israel not only lacks a constitution, but also an upper house to review legislation. The government of the day controls parliament. Members of Mr Netanyahu's far-right coalition are already introducing a raft of controversial proposals that include disqualifying "terror-supporting" Israeli Arabs from running in elections and allowing politicians with criminal records to serve as ministers.

ISRAEL,
WE HAVE
A
PROBLEM

A damning indictment

Legal experts say the changes could make Israeli leaders and military commanders more vulnerable to charges of war crimes in international courts because it would be harder to argue that they are subject to an independent judiciary at home. The government's opponents, who include business leaders and former generals and intelligence chiefs, object to both the content and process of the reforms. They are being rushed through in a series of raucous committee meetings, where the objections of the opposition and legal experts have been dismissed.

"Democratic countries like ours can become dictatorships," warned Ron Huldai, the mayor of Tel Aviv, Israel's secular and liberal bastion. "But dictatorships can only return to be democracies through bloodshed." Such dire predictions are increasingly common. On February 12th Isaac Herzog, Israel's president, said that the country was "on the brink of constitutional and social collapse". He called on the politicians to discuss a watered-down version of the plans. The government refuses. Yair Lapid, the leader of the opposition and a former prime minister, is willing to discuss legal reform but insists a presidential committee should come up with a constitutional proposal to put to the Israeli people.

Mr Netanyahu's personal legal issues make reaching a consensus harder. The prime minister was once a staunch defender of the Supreme Court's independence but, facing charges for bribery and fraud (which he strenuously denies), he has become a fierce critic. And if the court were to recuse Mr Netanyahu, Israel could face a constitutional crisis.

Anxiety about the reforms is spreading. Israel's business community, which has rarely intervened in politics, has criticised the proposals. Workers from the tech sector, which accounts for more than half of Israel's exports of goods and services, have joined the protests and senior executives have threatened to move their money abroad. "Israel built a prosperous economy in part due to its strong institutions and clear ground-rules," explains Karnit Flug, a former governor of Israel's central bank. Making rapid and radical changes would jeopardise that, she argues.

The rancorous debate is forcing Israelis to grapple with the demographic and ideological changes that have brought their country's most religious and nationalist government to power. It is pitting supporters of the far-right parties most opposed to the Supreme Court, who are much less likely to serve in the army or work in tech companies, against the secular middle class, who have rallied around the court.

Israel's internal convulsions might seem less relevant to its relations with the rest of the Middle East, hardly a hotbed of liberalism. But Mr Netanyahu returned to office promising to establish formal relations with Saudi Arabia. His government's turbulent start may make that harder.

The kingdom does not much care about the state of Israeli democracy: it is not a democracy either. But the Saudis do care about their own self-interest. Shared hostility towards Iran has brought them closer to Israel over the past decade. For the Saudis to make the relationship official, however, they need something more. America brokered the Abraham accords, which saw four Arab states upgrade their ties with Israel in 2020. It would probably need to fill the same role in a Saudi-Israeli deal. Normalisation is a powerful card in Washington: if the Saudis play it, they will expect a big boost to their diplomatic standing.

Joe Biden has spent most of his presidency feuding with the kingdom. Now his administration is offering rare public rebukes (and much sharper private ones) of Mr Netanyahu's legal scheme. A president on icy terms with both Israel and Saudi Arabia may be disinclined to offer them incentives to make peace—and if he does not, the Saudis may be in no rush to join the Abraham accords.

Then there are the Palestinians, whom Mr Netanyahu would prefer to forget. King Salman, the nominal Saudi ruler, still feels

▸▸

for their plight, but he has largely delegated power to his son Muhammad, the crown prince. Younger Saudis have less sympathy for the cause. Still, if Israel annexes parts of the occupied West Bank, or takes similarly drastic steps, the Saudis are unlikely to sign a diplomatic agreement.

Israel's wars with its Arab neighbours have long kept its society united. Since 1967, when it occupied the West Bank and Gaza, the Palestinian issue has been the defining issue of Israeli politics. But as the Arab world has gradually accepted Israel's presence and hopes of resolving the conflict with the Palestinians have evaporated, the internal divisions over Israel's identity have sharpened. Mr Netanyahu has long exploited them, but now they are threatening to split Israel irrevocably. Mr Netanyahu wants peace with the Saudis to be his legacy. Instead he is jeopardising his country's democracy, prosperity and unity. ■

Syria after the earthquakes

Never let a crisis go to waste

DUBAI

The Syrian dictator hopes a quake will ease sanctions on his regime

Timing is everything after a disaster. For aid workers the first 72 hours are crucial, as injury, thirst and the elements conspire to kill survivors. Beyond that mark, their odds of rescue drop sharply. For autocrats hoping a disaster will ease their international isolation, however, the timeline is a bit more forgiving.

The rebel-held enclave in north-west Syria was hit hard by this month's earthquakes. On February 13th the United Nations said that Bashar al-Assad had agreed to ease the passage of aid into the region. His decision, a full week after the quakes, came too late for those trapped under the rubble for want of fuel and heavy machinery: they were already dead.

Helping them was not really the point. Mr Assad was already emerging from a decade in the diplomatic wilderness, as Arab states came to accept that he would stay in power. Now he sees a chance to woo the West as well—and no doubt hopes a gesture towards the rebel areas will help.

The quakes killed around 6,000 people in Syria, both in the north-west and in regime-held cities like Aleppo and Latakia. That number is sure to rise. The UN reckons that as many as 5m Syrians have been left homeless. Helping them will be a monumental task. After a decade of war Syria has been carved into a patchwork of statelets, impoverished and, to varying degrees, cut off from the rest of the world.

The north-west is controlled by Islamist rebels, some of whom belonged to al-Qaeda's former Syrian affiliate. In Mr Assad's telling, the area is a hive of terrorists. In truth most of its 4m people are destitute civilians, displaced time and again from other parts of Syria.

The rebel government has been wary about accepting help from regime areas. It also turned back a convoy organised by authorities in north-east Syria, which is controlled by a Kurdish-led administration. After a decade of war, its paranoia is perhaps understandable. The regime has a history of approving aid convoys to besieged areas, only to turn them back at the last minute or rob them. Instead the rebels want help to be sent via Turkey, through which food, medicine and other essentials have flowed for years.

Mr Assad does not control this stretch of border, but he postures about sovereignty and refuses to consent to the deliveries. Aid thus arrives under a Security Council resolution first passed in 2014. Russia, Mr Assad's ally on the council, has sought for years to shrink or even stop the shipments.

Since 2020 the UN had been limited to using just one border post, called Bab al-Hawa. But the quakes damaged motorways in Turkey that lead to the crossing, just as demand for aid soared. Mr Assad has now agreed it may flow through two additional border posts.

But the regime's motives are hardly benevolent. It is struggling to respond to devastation in its own areas, and has tried to blame a convenient scapegoat: the West. "All we want from Europe and the US now is to lift sanctions," Bouthaina Shaaban, a presidential adviser, said soon after the quakes. "If they lift sanctions, the Syrian expatriates and the Syrian people will be able to take care of their country."

In fact, dozens of planes carrying aid have landed at Damascus airport since the earthquake. The donors include close American partners such as Egypt, Jordan and the United Arab Emirates. Sanctions have not prevented them from sending help to regime-held territory.

The sanctions can hold up aid on the margins. Some well-meaning foreigners who tried to organise crowdfunding efforts have found that their campaigns were rejected because sending money to Syria might be a legal risk. To that end, America's Treasury Department issued a broad waiver on February 9th covering "all transactions related to earthquake relief". It will remain in place for six months; diplomats expect it will be extended.

Mr Assad hopes to see more of this. Since the quakes he has received calls of support from most Arab leaders. Some Western analysts have raised broader questions about sanctions: even if they do not hamper disaster relief, they do hobble the Syrian state, which has consequences for civilians. The Caesar Act, a package of American sanctions on Syria that became law in 2019, explicitly targets the energy and construction sectors—in a country with widespread blackouts and vast damage to housing and infrastructure.

Those who want to relieve the plight of Syrians face a horrible dilemma. Easing sanctions would not ensure Syrians receive 24-hour electricity and new homes. Keeping them in place, however, all but guarantees they will not. Western governments are loth to channel money to Mr Assad to help him rebuild; they are also anxious to avoid blocking that rebuilding entirely. In working out how to help the people living amid the devastation of Syria while not rehabilitating a blood-soaked regime, there are no easy answers. ■

Who will come to their aid?

Southern demography

Baby gap

FLORENCE, MADRID AND VALLETTA

Why southern Europe has fewer babies than the north

THE MUSEO DEGLI INNOCENTI in Florence has an unusual name and hosts an unusual display: a collection of small broken objects, mostly medallions. They were split in two when a baby was delivered to Florence's hospital for foundlings. Half the object, known as a *segnale di riconoscimento*, was kept at the hospital—in reality, a children's home—while the other went to the mother. Should she wish to reclaim the child, she would have proof it was hers. Many of the children were born out of wedlock. But others were from families without the means to feed another mouth.

The *segnali* are reminders of a time when Italy had an excess of births. Today, in common with many other European countries, it has hardly any. Its fertility rate (the average number of babies each Italian woman can expect to have) has dropped from 2.66 in 1964 to 1.24 in 2020. In one region, Sardinia, it is below 1. This makes Italy part of a band of ultra-low fertility across southern Europe, from Portugal and Spain (1.40 and 1.19) in the west to Greece and Cyprus (1.39 and 1.36) in the east. As 2.1 children per woman are needed to keep numbers stable, these countries must have more babies, admit more immigrants or see their populations dwindle.

Only the first of these options appeals to Europe's right-wing populists. So they are keen to find ways to persuade native-born women to have bigger families. Few have put such emphasis on the birth rate as the Brothers of Italy, the hard-right party whose leader, Giorgia Meloni, is the country's new prime minister. The encouragement to Italians to multiply flows in part from the party's opposition to unauthorised immigration. "Support for the birth rate and the family" was top of a list of 15 policy objectives in its electoral manifesto.

Constrained by Italy's huge gross public debt, of around 147% of GDP, Ms Meloni's government has so far had limited scope for realising its aims. The budget for next year nevertheless includes some changes that the finance minister, Giancarlo Giorgetti, has suggested are just the beginning. They include an increase in child benefits for the first child and for families with more than three children; a modest extension of maternity leave; reductions in the VAT on baby-care products; and changes in the pensionable age so that the more children a woman has, the earlier she will be able to retire.

→ Also in this section

47 Building bad in Turkey
48 Edgy Moldova
48 The rule of law in Poland
49 The San Remo song festival
50 Charlemagne: France's Russia fixation

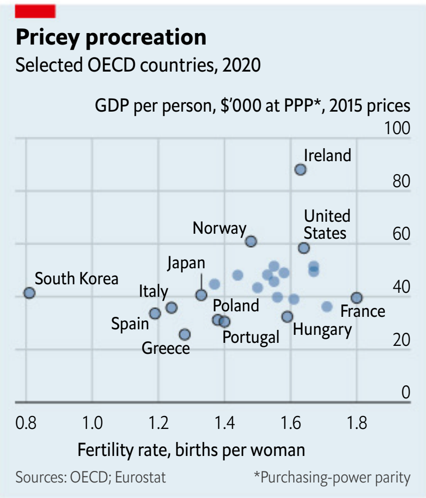
The new facts of life

In the worldview of the new right, feminism has given rise to generations of women who would rather work and play than raise children. But this narrative ignores two crucial facts. The first is that the most staunchly feminist countries, those in northern Europe, now have some of the continent's highest birth rates. And the second is that women are often not opposed to having children; they are having fewer than they say they want, mostly for economic reasons.

Globally, a fairly robust law has long linked national wealth and birth rates: as countries become richer, birth rates fall. But a group of researchers at the Centre for Economic Policy Research argue that among the richest nations the opposite now applies. In the OECD, a club mostly of rich countries, there is now a positive correlation between GDP per head and fertility, they find (see chart). The most likely explanation for this is complex. As women enter the workforce, they increase economic output with their labour and talent. They may also then vote for governments that spend money making it easier to be both a parent and an employee. Spending on family support also correlates positively with fertility. Generous paid maternity leave is one such policy; and the evidence that supports spending on child care is even stronger. If women cannot easily work in the early years of a child's life, the work-family trade-off remains ironclad.

In Malta—once called “more Catholic than the pope” but now boasting Europe’s lowest fertility rate, at 1.13—women are still more than 30 times more likely than men to drop out of work to look after their families. The tension between money, career and family can be acute. Marie Briguglio, a former senior civil servant, chose to postpone having her only child until she was 38. She says it was about the opportunity cost: had she had children earlier her rise through the administration would have been jeopardised.

“I played the lottery every week after my second son was born,” says Inés, a small-business owner in Madrid. Having failed to score the winning ticket, she decided not to have the third child she would have liked. The gap in Spain between the number of children born (1.19 per woman) and the number desired (around two) is one of Europe’s highest. Alicia Adserà, an economist at Princeton, looks for explanations wider than those (like child care, maternity leave, child tax breaks or men’s housework) directly related to family. She says that broader conditions—in particular the jobs market—play a critical role too.


Pricey procreation
Selected OECD countries, 2020

Sources: OECD; Eurostat *Purchasing-power parity

Spanish women surged into education and work after the “national Catholic” dictatorship of Francisco Franco, who died in 1975. The country built a wave of child-care centres, and today subsidises them with a voucher each month. Spanish maternity leave is relatively miserly (16 weeks) by European standards; but men get the same amount as women. Grandparents provide a great deal of help with children, and for richer families, immigration (especially from Latin America) provides a source of affordable nannies.

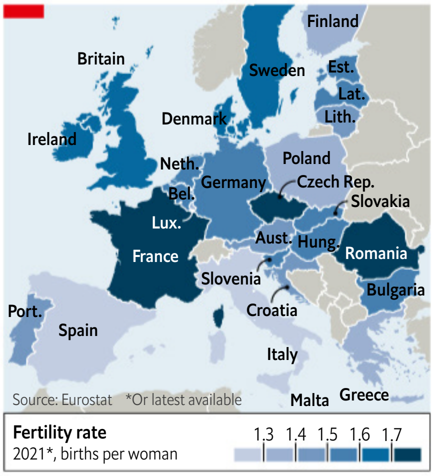
But despite all that, Spain lags begin in one crucial area: opportunities for the young. The youth unemployment rate is among the highest in the rich world, at around 35%. A study of the years 2008-16 found Spanish youngsters worked for almost eight years stringing together temporary contracts before landing a permanent one. This delays marriage as well as childbirth; almost half of 25- to 34-year-olds now live with their parents. When Spaniards do finally couple up they have experienced the freedoms of childless adulthood for a decade. Around a fifth of women go on to have no children at all, a big driver of the overall drop in fertility. For those who take the plunge, the average age of women at first birth, at 31, is one of the highest in Europe, along with Italy and Malta. Many stop there; one-child families are so common that *El Mundo*, a conservative newspaper, envisioned a future country “without brothers and sisters”.

The late start to procreation may be a big factor in low overall fertility. At any rate, a paper by Poh Lin Tan of the University of Singapore notes that a raft of economic incentives offered in Singapore to parents has failed to stop the continuing drop in fertility there, to 1.16 in 2018. She says that reducing the age of childbearing is the “lowest-hanging fruit” of policymaking.

But that requires economic opportunities, says Dr Adserà. This can take the form of a large number of stable jobs, for example in the public sector, as in the Nordic countries, she says. (Women are generally over-represented in the public sector.) Or it can take the form of dynamic job markets, where a job lost is reasonably likely to be replaced, perhaps by a better one—as in America, Britain or Australia, which boast higher fertility than southern Europe.

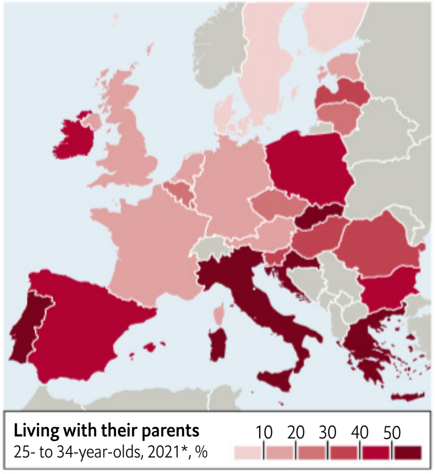
Fix, don’t bribe

But what seems clear is that simple baby bribes—whether they come as one-time bonuses, monthly giveaways or tax credits—are not enough. More generally, says Frank Furedi of MCC, a Hungarian-government-funded think-tank, “pro-natalist policies simply don’t work.” The evidence from Poland seems similar; the government there has run a generous monthly child benefit since 2016, but it has not seen an uptick in babies born. The best countries can do is make combining work and family less difficult. As Georgia Meloni’s government considers new measures for Italy, the political temptation will be to announce “pro-family” policies. But what young couples really want is job opportunities, support and choice. If all are available, more of them may use that choice to have more babies. ■

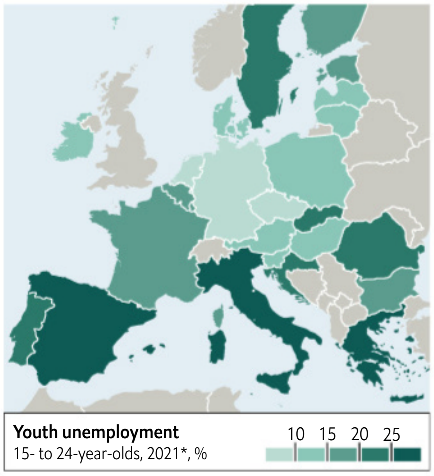


Source: Eurostat *Or latest available

Fertility rate
2021*, births per woman



Living with their parents
25- to 34-year-olds, 2021*, %



Youth unemployment
15- to 24-year-olds, 2021*, %

Turkey's earthquakes

Building bad

OSMANIYE, KAHRAMANMARAS AND ADIYAMAN

Turkey's earthquakes show the deadly extent of construction scams

WHEN THE quake hit, the apartment block in Osmaniye, where Halise Sen had once lived, collapsed like a house of cards, burying her former neighbours under nine floors of concrete. Mrs Sen, the head of the local chamber of architects, looks over the wreckage. "There's no reinforced steel here," she says, "so the concrete lost its strength and the columns collapsed, along with the floors, as soon as the ground started to shake."

Mrs Sen's husband, Mustafa, quit the construction sector years ago, and now grows olives and walnuts. Other contractors were undercutting his prices and ignoring building codes. "If we used 100 tonnes of iron in a building, they would use 90 tonnes," he says. Osmaniye sits near an active fault line. "I knew we were on the brink of catastrophe," he says.

That catastrophe struck on February 6th, in the form of two earthquakes, of magnitudes 7.8 and 7.5, the deadliest in Turkey's history. Thousands of buildings have collapsed (see Graphic Detail). At least 36,000 people are dead in Turkey. Another 6,000 were killed in Syria (see Middle East & Africa section). More than 30,000 rescue workers, accompanied by locals and teams from dozens of countries, are working around the clock to find survivors.

But the rescue effort now resembles a mass exhumation. Tens of thousands of people are still thought to be buried under the wreckage. In Kahramanmaras, a city of more than 500,000, smoke from fires that broke out as a result of the quake (or were started by people trying to keep warm) envelops mounds of rubble that stretch for entire city blocks. The thickening stench of death covers Adiyaman, more than 100km to the east. A Kurdish family huddles and weeps as rescue teams pull five dead relatives from the debris. A woman faints.

Across the region, millions of people made homeless sleep in tents provided by the country's disaster agency, in mosques, schools, libraries or in their own cars. Few dare enter their homes. Some sleep rough. The delayed response and a shortage of equipment compounded the suffering. Teams took days to reach cities like Adiyaman. By then the voices of trapped survivors had given way to silence.

The real culprits

Shoddy building methods, corruption and bad policymaking, components of an economy powered by construction and rent-seeking, may have caused the most deaths, however. The government of Recep Tayyip Erdogan, Turkey's president, bears much of the blame, analysts say. But so do its predecessors, as well as municipalities, developers and planners. "This is a perfect crime," says Murat Guvenc, an urban planner. "Everybody has their finger in the pie."

Turkey has strict building codes, adopted in the wake of an earthquake that killed 18,000 people on the outskirts of Istanbul in 1999 and updated five years ago. Under an urban-renewal scheme thought up by Mr Erdogan's government, more than 3m housing units have been renewed.

The problems lie in implementation and oversight. Building permits are easy to acquire, and inspections weak. The companies that are mandated to carry them out are paid by the developers. Projects usually comply with government standards at the start of construction, but not by the end, says Mr Guvenc. When the inspectors leave, developers may reduce the amount of iron they use or cut down on the number of stirrups, the steel loops that prevent beams and columns from buckling under pressure. They may even tack on an extra floor. Then they enter informal negotiations with local authorities. "A lot of money may end up changing hands," says Mr Guvenc. "We are talking about corruption par excellence."

This means the difference between life and death. In Osmaniye, as elsewhere, most of the collapsed buildings date back to before the 1999 earthquake. But scores of new ones have also come down. A luxury housing estate completed only a decade ago in Antakya, south of Osmaniye, has entombed perhaps hundreds of people. The contractor responsible was arrested on February 11th while attempting to leave Turkey. In nearby Erzin county, however, not one building collapsed. The local mayor and his predecessor told local media that they did not allow any illegal construction. Both used the same phrase: "My conscience is clear."

Construction amnesties, which allow owners to register unlicensed properties in exchange for a fine, made a bad situation much worse. Mr Erdogan's government passed several such amnesties, the latest in 2018, ahead of general elections. The opposition backed the move, because it was popular with voters. The government reaped the political dividends, while millions of property owners ended up paying into state coffers and assuming the risk. A year later, Mr Erdogan appeared in Kahramanmaras, proudly announcing that the programme "had solved the problems" of 144,000 of the city's residents. More than half of the country's housing stock did not comply with building standards, the programme revealed.

"Look," says Mrs Sen, pointing to what remains of her old neighbourhood, "if these buildings that were legally built and approved by the municipality at the time collapsed, then how can the illegal ones survive?" Things need to change from the top down, says her husband. Politics must stay out of urban development, supervision must dramatically improve and the patronage networks connecting the government and the construction sector must be broken up. "Otherwise," he says, "ten years from now you'll see the same scenes you see here somewhere else." ■

Moldova

On the edge

CHISINAU

A small state fears a Kremlin-backed coup plot

On February 9th Volodymyr Zelensky, Ukraine's president, said he had informed his Moldovan counterpart of a Russian plot to destroy her pro-Western government. One day later a Russian missile streaked across Moldovan airspace on its way to a target in Ukraine. That same day Natalia Gavrilita, Moldova's prime minister, resigned. Yet the cause of her fall was not the threat from Russia but rather soaring inflation, which has left huge numbers of Moldovans struggling to pay their bills.

Dorin Recean, Ms Gavrilita's replacement (pending parliamentary confirmation) says raising wages is a priority. But he stresses that beefing up Moldova's defences is another. In the past few weeks Moldovan officials have appealed to the West for help in securing the country's virtually undefended skies. But devoting resources to rebuilding Moldova's puny defence capabilities is controversial when the cost of living is the main concern of most people.

This year Moldova's defence budget will leap by 68% compared with 2022. The sum is still tiny; approximately €75m ($80m), or 0.55% of GDP, according to Anatolie Nosatii, the defence minister. He jokes that he cannot even afford to change the Soviet-era map of Europe that dominates his office. The country's only tanks are museum pieces, and barely half of its 6,500 soldiers are professionals. Should war break out, the police plus border guards plus reserves could boost the number of men under arms to 45,000, but they would be poorly equipped and enjoy no air support. For its part, besides the hundreds of thousands in Ukraine, Russia has 1,500 troops (most of them local recruits) stationed in Transnistria, a breakaway region in the east of Moldova that the Kremlin sponsors.

On February 2nd Sergei Lavrov, the Russian foreign minister, said that the West wanted Moldova "to play the role of the next Ukraine". Similar previous threats have prompted Moldova's friends to come to its aid. Last June the country became an official candidate for membership of the European Union, and the EU has now promised €40m in non-lethal military aid for such things as drones and cyber-defence; Germany is supplying 19 armoured personnel-carriers. On February 14th-15th a meeting of NATO defence ministers approved another plan to help Moldova rejuvenate its defences.

Internally things may be changing, too. Although bigwigs in Transnistria prospered under Russia's umbrella, Alexandru Flenchea, the outgoing prime minister's adviser on the breakaway region, says the war has changed everything. Moldovan officials are in intense, if discreet, contact with Transnistria's leaders; Mr Flenchea spies an opening for a potential settlement of the conflict. Most of Transnistria's leaders are more interested in money than in Russia, he reckons, however hostile their rhetoric. In the past a lucrative chunk of that has come from smuggling goods in and out of Ukraine, but the war has now closed that border.

One of Mr Nosatii's constraints in seeking aid from abroad is that Moldova's constitution commits it to neutrality. Last month Maia Sandu, the president, said, "there is a serious discussion…about our capacity to defend ourselves, whether we can do it ourselves, or whether we should be part of a larger alliance." But Moldovans would almost certainly reject NATO membership if a referendum were held today. One official says that the country's leaders see it as their mission to start shifting public opinion, but that it is hard.

When Russian forces pushed into southern Ukraine a year ago several Moldovan officials expected their tanks to roll into Chisinau within days. That fear has receded. But, says Mr Nosatii, the security issue is not simply about replacing Moldova's antiquated military hardware. "It is more about the hybrid war that Russia is using against Moldova," he says. That includes "disinformation, false news, cyber-attacks and everything that will discredit the government and create the conditions to change our leading party to a more pro-Russian one". On February 13th Ms Sandu said that Russia was plotting to sponsor violent protests with a view to overthrowing the government. She said her prosecutors and spooks needed more powers to combat the threat from the Kremlin. ■

125
За Родину!

Not battle-ready

Rule of law in Poland

Judgment call

WARSAW

Minor judicial reforms may not satisfy the EU's demands

When Poland's justice system went after Maciej Ferek, a regional-court judge in Krakow, it used a heavy hand. In late 2021 he was suspended, his pay was cut in half and the locks on the courtroom doors were changed to keep him out. His mistake had been to challenge the changes to the judiciary which Poland's government has made over the past eight years. These have given politicians ultimate control over appointing and dismissing judges, muzzled those who dissent and stacked the Constitutional Tribunal with cronies.

The European Union thinks Poland's politicisation of its judiciary violates the rule of law, which is guaranteed in the EU's founding treaty. After years of dithering, the EU has begun to act, withholding €35bn ($37bn) in grants and loans from its pandemic relief fund until Poland rolls back some of its judicial changes. And the Poles are cracking. On February 8th Poland's parliament passed a bill that ends sanctions against dissenting judges. It would shift the job of disciplining them from a politically appointed chamber in the Supreme Court, which the European Court of Justice (ECJ) condemned, to a less politicised arbiter, the Supreme Administrative Court.

It is now up to Poland's president, Andrzej Duda, to sign the bill. Yet he has first

▸▸

asked for a review from the very Constitutional Tribunal which the government has politicised. Infighting on that court could hold things up for months. Meanwhile, on February 15th the European Commission took Poland to the ECJ again, over a ruling by the Constitutional Tribunal that EU law does not supersede Polish law (which contravenes a founding principle of the bloc).

Brussels seems undecided over whether the bill goes far enough. Experts say it does not. The problems run far deeper than the bodies set up to whip judges into line. In 2017 the ruling Law and Justice (PiS) party changed the law so that parliament, instead of other judges, could select members of the National Judicial Council (NCJ), which appoints and promotes judges. That renders the NCJ illegitimate, according to the European Court of Human Rights (ECHR). Yet it continues to operate and has promoted some 2,500 judges. Their verdicts are open to procedural challenge; some have been undone. Mr Ferek was suspended for querying the credentials of one such judge. "It is as if the courthouse janitor printed a verdict from my computer and signed it as a judge," he says.

Kees Sterk, a former president of the European Network of Councils for the Judiciary, says the NCJ is the key : "You do not need a disciplinary chamber if you have the power to appoint judges." In a recent case the head of the court of appeal in Warsaw, who is also the top disciplinary officer for judges, replaced three veteran colleagues with less experienced ones for questioning the status of a fellow judge. "That was a *de facto* punishment," says Bartlomiej Przymusinski, the spokesman of Iustitia, a rule-of-law group to which 40% of Polish judges belong. The ECHR has ordered their reinstatement.

Such unjustified transfers, and state media campaigns denigrating judges, have had a chilling effect. "No one in Poland is prosecuting politicians of the ruling camp for corruption scandals," says Mr Przymusinski. Another consequence has been to further slow the sluggish wheels of Polish justice. According to government statistics, the average first-instance court case took 69% longer to settle in 2021 than in 2015, when PiS came to power. Ironically, the party claimed its reforms would speed things up. Marta Kaminska, a solicitor in Olsztyn, a city 170km north of Warsaw, says the waiting time for a hearing in cases such as divorces has lengthened by a third.

Other European court systems are losing trust in the Polish one. Dariusz Mazur, a criminal-court judge in Krakow, says that before Dutch and Slovak judges honour European arrest warrants demanding the return of suspects to Poland, they ask him whether the judge who will preside over the case is independent. In 2021 a court in Amsterdam refused to extradite a suspected drug-trafficker for fear he would not get a fair trial in Poland. Politicised courts could spook foreign investors, who may doubt they would be granted a fair hearing against a state-backed company.

Under pressure from Brussels, Poland has reinstated most of the suspended judges in the past few months. But the number of dubiously appointed ones continues to grow. And the government's bill may create more problems. The Supreme Administrative Court does not have a constitutional remit to discipline judges, and though it is less politicised than the Supreme Court's disciplinary panel, roughly 30% of its judges have been appointed by the NCJ.

Poland's main opposition party, Civic Platform, fears that if it votes against the bill it will be blamed for denying Poland its EU funds. Parliamentary elections will be held in the autumn. As for the EU, rule-of-law advocates worry that it lacks political will. The bloc's justice commissioner, Didier Reynders, has called the bill a "promising step forward". Ursula von der Leyen, the commission's president, may hesitate to press a divisive case against Poland at a time when her priority is keeping Europe united against Russia. And the commission seems worried about forcing Poland to scrap measures that have not yet been explicitly condemned by the ECJ, as the disciplinary chamber was. Yet "if you only fire your artillery when you are certain you will hit, you will lose the war", says Mr Sterk. ■

Italy

Knives out at the festival

SAN REMO

Singing is a serious business in the home of Verdi and Puccini

MANY COUNTRIES have annual rituals that baffle outsiders. Every year, thousands of half-naked men run through the freezing streets of Inazawa in Japan. And every year at about the same time, Italy stages the San Remo song festival. For five nights, millions of Italians stay awake into the early hours to watch its snail-like progress towards a grand finale. And for five days the previous evenings' televised provocations and commotions monopolise debate in the media, and in the cafés and bars of Italy.

San Remo was once just a song competition. The winner still goes on to represent Italy at the Eurovision contest. But over the years it has morphed into something else. Punctuated by monologues, it has become a platform for the airing of mostly progressive grievances. Thus, on February 9th, Paola Egonu, a volleyball player who carried the Italian flag at the opening of the 2021 Olympics, delivered an emotional denunciation of racism. The co-host of the final round wore a striking gown (pictured) to protest against the repression of women. So far, so par for the course.

Dressed for protest

But this year, with a new government led by Giorgia Meloni and dominated by her hard-right Brothers of Italy (FdI) party, San Remo became embroiled in politics as never before. Italy's president, Sergio Mattarella, attended the opening night on February 7th, and heard a tribute to the Italian constitution delivered by Roberto Benigni, an Oscar-winning comedian. That was taken amiss by Ms Meloni's ally, the leader of the Northern League, Matteo Salvini, whose party saw it as a veiled attack on its plans for greater regional autonomy. The following night, a rapper, Fedez, tore up onstage a photograph showing a junior FdI minister dressed as a Nazi. By the end of the festival, government members and supporters were calling for the heads of the bosses of Italy's public broadcasting corporation, RAI, which stages the event.

What made the politicisation of San Remo all the more sensitive was that it came in the week before the government faced its first test at the ballot box. On February 12th and 13th elections were held in Italy's two most populous regions, Lombardy, which takes in Milan, and Lazio, which includes Rome. The right coasted to easy victories in both contests. Perhaps that will quieten the critics down.

Charlemagne | France's fatal Russia fascination

A long history helps explain why Paris has found it hard to break fully with Moscow

VOLTAIRE WAS so enchanted by the emerging Russian empire that he penned gushing letters to Catherine the Great. In the 1760s and 1770s the French Enlightenment thinker and the Russian empress exchanged 197 handwritten missives, all in French, a tongue favoured by the Russian nobility. Voltaire praised Catherine as an "enlightened despot", and told her: "If I were younger, I would become Russian." In 1773 she received Denis Diderot, another silk-stockinged *philosophe*, at the Court of St Petersburg. Thus Russia took its place in the French imagination as a like-minded haven of arts and letters, of the triumph of civilisation over chaos.

If Russia's war on Ukraine exposed Germany's industrial reliance on Moscow, it has laid bare in France a different sort of dependence: a fatal fascination with Russia. On the far left, this is a relic of the Bolshevik revolution, anti-Americanism and communism. During the cold war, the French Communist Party looked to Moscow, and dropped the hammer and sickle from its membership card only in 2013. On the far right, it stems from admiration for patriotic nationalism and authoritarian leadership. Marine Le Pen's campaigns have been partly financed by a Russian bank.

Russia's hold on the French imagination is not confined to the extremes. It reaches well into the parquet-floored salons of the Paris establishment. As a young man, Jacques Chirac, a former Gaullist president who sought a multipolar world to counterbalance American hegemony, translated Pushkin's "Eugene Onegin" into French. Chirac was given Russia's highest honour, and in turn awarded Vladimir Putin the *légion d'honneur*. François Fillon, a prime minister from the centre-right, was a regular guest of Mr Putin's. The day after the tanks rolled in, Mr Fillon gave up board positions at two Russian firms, having apparently seen the invasion of Crimea in 2014 as no obstacle to accepting the posts.

Those who gravitated to this world comforted themselves with the thought that France's *tropisme russe* was neither dangerous nor grubby, but the fruit of a special cultural understanding. For nearly a decade from 2008 Alexandre Orlov, then Russia's ambassador to Paris, entertained the Paris elite, and oversaw the construction of a glittering gold-tipped Russian Orthodox cathedral on the left bank of the Seine. When Mr Orlov published his memoirs in 2020, the preface was written by Hélène Carrère d'Encausse, the "perpetual secretary" of the Académie Française. His book, she suggested, would help readers to understand "the disarray" of Soviet Russians at the collapse of their country.

Of course, in the arena of France's riotous political debate, as within the hushed corridors of the diplomatic service, rival geopolitical strains compete. A reflexive sympathy for Russia is neither universal nor irresistible. François Hollande, a Socialist former president, cancelled a French contract to deliver two Mistral-class warships to Russia after it annexed Crimea. Bernard-Henri Lévy, a French philosopher for whom no battlefield goes unvisited and no white shirt unironed, has for years urged France to do more to stand up to Russian aggression in Ukraine; his latest film to this end, "Slava Ukraini", is out on February 22nd.

Even France's post-war narrative of strategic equidistance between America and the Soviet Union has its share of mythology. As Benjamin Haddad, one of Emmanuel Macron's parliamentarians, puts it, "geopolitical fascination for Russia is partly reconstructed with hindsight": in a crisis, Charles de Gaulle stood with his transatlantic allies. As for the French people, they seem clear: three-fifths tell polls they have a positive opinion of Ukraine's Volodymyr Zelensky, and fewer than one in ten of Mr Putin.

This is the backdrop against which France's diplomacy under Mr Macron should be set. It was to Versailles, where Peter the Great had travelled, that the freshly elected Mr Macron first invited Mr Putin with great pomp, lauding "the Russia that wants to open up to Europe". More than any other European leader, the centrist French president thought that he could talk Mr Putin out of going to war, even as he massed his tanks on Ukraine's borders and America's spooks were warning that invasion was imminent. Almost alone, Mr Macron mused about a day when Russia might be brought into a "new European security architecture", to keep it from falling into China's arms. The invasion, the massacres, the bombing of civilians and children: all the unspeakable horrors of Mr Putin's war have, over time, forced a form of bereavement on the French leader. His charm offensive failed, brutally.

The shadow of Versailles

This is a critical moment for Mr Macron. He continues to listen both to voices counselling traditional caution and restraint, and to those urging him to take more leadership on Ukraine and to dispel illusions about a future Russia. His quest to embrace the complexity of war and peace will doubtless yield further ambiguity. The French president has not spoken to Mr Putin since September 2022, but says the lines are still open. Only two months ago he was muttering about post-war "security guarantees" for Russia. Mr Macron wants both to back Ukraine at war, and to be a mediating voice at the negotiating table when it comes to peace.

Yet in recent weeks he has seldom sounded as clear, declaring that France is behind Ukraine "all the way to victory" and delivering more and more heavy weaponry—though not yet promising battle tanks, unlike many of his allies. "I think he has changed, and this time for real," said none other than Mr Zelensky in *Le Figaro* newspaper on February 8th, the day he flew into Paris from London for dinner. When the next morning the two leaders boarded the French presidential plane bound for Brussels, who should be there at the airport for a chat but the white-shirted Mr Lévy. Mr Macron's ears are open. But ultimately, on diplomacy as on all matters, he is his own counsellor. It might be too much to expect the French president to shed his share of the country's Russian fascination altogether; but he is moving in the right direction. ■

→ Also in this section

52 Asylum hotels
53 Bagehot: The retained EU law bill

→ Read more at: Economist.com/Britain

— The post-pandemic economy
— A marine mystery
— The Chagos Islands

Scottish politics

A house divided

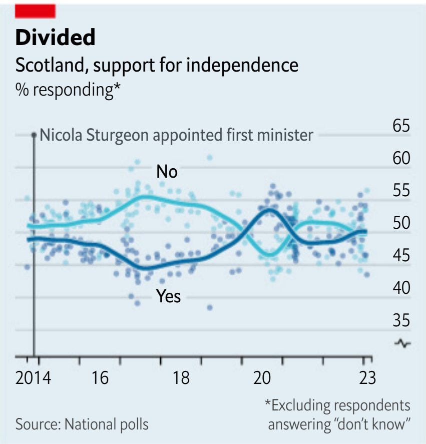
Nicola Sturgeon leaves with Scotland split in two. That is a mark of her triumph and a symbol of her failure

When Nicola Sturgeon joined the Scottish National Party (SNP) as a 16-year-old schoolgirl, the party was a minnow and the prospect of independence a distant dream. It held two seats in the Westminster Parliament. No more than a third of Scots supported divorce.

On February 15th, at the age of 52, Ms Sturgeon said she was resigning as first minister of Scotland and as the head of the dominant party in Scottish politics. The SNP has governed since 2007; she has been first minister since 2014. The party holds 45 of 59 Scottish seats in Westminster. In polling it still consistently commands the support of around 45% of the Scottish electorate. The numbers ebb and flow but roughly half of Scots favour independence. It is so much, and yet much too little.

Such a solid electoral bloc in favour of independence is not a given. After the referendum of 2014 went decisively in favour of the union, support for breaking away might have fizzled. Instead, Ms Sturgeon ensured the question remained the dominant divide of Scottish politics; SNP membership surged on her watch.

Scots now hold their views on the constitution more firmly than any party identification, note Ailsa Henderson and her colleagues in "The Referendum that Changed a Nation", a new study of the consequences of the 2014 vote. It predicts how they feel about much else: rejoining the EU, the performance of the Scottish government and even Scotland's readiness for another bout of covid-19. Scotland is two nations, riven by one issue. Three-quarters of independence supporters say they could never vote Conservative. Six in ten unionists say they could never vote SNP.



Divided
Scotland, support for independence
% responding*

Source: National polls

*Excluding respondents answering "don't know"

That big block of entrenched support is Ms Sturgeon's legacy but it is also her failure. She could not lift support for independence to a level that would force Westminster to accede to demands for a second referendum. A large nationalist movement created an equally large and determined unionist one. Public debate became bitter and toxic; Ms Sturgeon did too little to temper it. In her resignation statement, she acknowledged she was part of the problem: Scottish public opinion about her is too polarised to widen separatism's appeal. It will require someone else "to reach across the divide in Scottish politics".

Ms Sturgeon pioneered a form of liberal populism. Liberal, because her idea of an independent Scotland was Europhile and socially democratic—more Scandinavian than British. The SNP has always cast Scotland as essentially different to Tory England. The vote for Brexit in 2016 and the ascent of Boris Johnson to Downing Street seemed only to sharpen the divide. During the covid pandemic, her stable, unflashy leadership saw support for independence temporarily surge and won admirers in liberal England who were tired of Mr Johnson's chaos.

But populist, because in the years since the referendum of 2014 the case for Scottish independence has still not been fleshed out. Fundamental questions, such as how an independent Scotland would switch to a new currency, remain unanswered. The movement still relies heavily on appeals to national pride, denunciations of Tory perfidy and the rhetorical ju-jitsu in which Ms Sturgeon is a black-belt.

That tendency has worsened in the final months of her time in office, as the road to independence became steeper. In November 2022 the Supreme Court in London ruled that the Scottish Parliament could not unilaterally legislate for an independence referendum. Ms Sturgeon bowed to activists' pressure for a more radical strategy and announced that the next general election would be a de facto referendum. The SNP was Scotland's "democracy movement", she declared. A good many unionists, who had rejected independence in a referendum eight years before, regard themselves as no less democratic.

More recently, when a bill passed by the Scottish Parliament to make it easier for people to change their gender in law was vetoed by the Scottish secretary in Westminster, Ms Sturgeon accused him of behaving like a "governor-general". Allusions to colonialism are the preserve of the hairier fringes of the movement. If Ms Sturgeon had hoped this issue would deepen the rift between Scotland and England, the plan backfired: the gender-recognition measures were opposed by large majorities of both Scots overall and of SNP voters. Her hold on the party weakened.

She will leave office once a successor has been chosen. There is no obvious heir; she admits herself that her cabinet may have been "eclipsed". Some 47% of SNP voters, and 57% of all Scots, say they "don't know" who should follow her, according to a survey conducted in October by Savanta, a pollster. Kate Forbes, the incumbent finance minister, is an early favourite.

Scotland's public services ought to be top of their in-tray. Scotland used to score well above other rich countries in the education rankings; now its performance is distinctly average. It has fallen behind England in both maths and English, according to the PISA rankings, where teenagers sit a standardised test. Waits in accident-and-emergency departments are gruelling on both sides of the border.

But the contest to succeed Ms Sturgeon is likely to be dominated by the question of how to break the independence deadlock. The SNP was scheduled to meet for a special conference to fine-tune the de facto referendum plan in March; Ms Sturgeon says that is all now for her successor to decide. A rift may widen between activists who are impatient to push along this path and some MPs who fear the gambit will sorely test the patience of Scots.

The biggest beneficiary of Ms Sturgeon's decision lives south of the border: Sir Keir Starmer, Labour's leader. If the SNP is now weakened by the loss of its outstanding political figure, he will hope to convince nationalist voters that a Labour government, rather than independence, is the fastest route to displacing the Tories in Westminster. And if a referendum on Scottish independence appears a more distant prospect, English voters may feel less worried about a Labour government doing back-room deals with the SNP in order to hold power. Sir Keir has paid generous tribute to Ms Sturgeon's years in office. But a great void has suddenly opened up in Scottish politics, and he would like to fill it. ■

Housing migrants

Hostel environment

SKEGNESS, LINCOLNSHIRE

Asylum hotels provoke a backlash from locals

A SLOW RAIN falls over the Sun Hotel; an unpleasurably brisk wind whips along the Pleasure Beach; the Sea View Pub offers nothing of the kind; and Skegness's "No.1 Fun Pub" is shut and shuttered. No one is visibly having any fun anywhere. The northern seaside town of Skegness has long been famous for offering pleasures that are at best muted—as even it acknowledges. Its famous slogan, coined in its Edwardian heyday, reads less like a boast than a confession, or perhaps a threat: "Skegness is SO bracing."

Skegness is also so cross. Around 200-230 asylum-seekers, many from Iran, Iraq and Eritrea, are being housed by the Home Office in five of the town's guesthouses. This is not unusual: 45,000 asylum-seekers have been housed over the winter in a variety of British hotels, from the Suites Hotel & Spa in Knowsley, Merseyside ("the only 4-star hotel in the North West where everyone gets a Suite!") to a Hilton in the wilds of north Wales ("A stylish stay in beautiful Snowdonia").

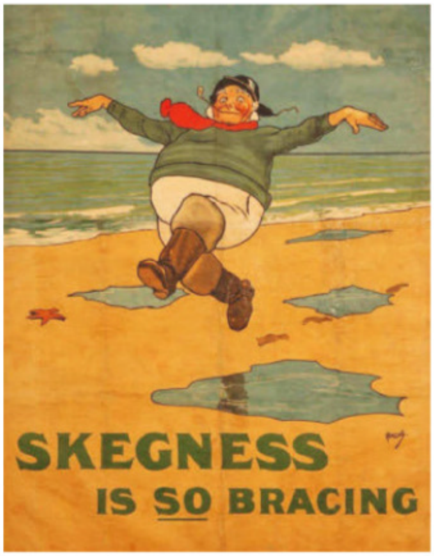
The arrangement is a useful stopgap both for a government that is struggling to cope with rising asylum claims, and for hotels that are keen to fill off-season rooms. But it is costly both financially—the government's daily hotel bill for asylum-seekers is now £6.8m ($8.3m)—and politically. On February 10th far-right protesters gathered outside that hotel in Knowsley; a police van was set alight in the ensuing disorder. Asylum-seekers there have described themselves as "shocked" and "afraid" in the wake of the violence.

The mood in Skegness is much less inflammatory but still unenthusiastic. Skegness is "always the butt of everyone's jokes", says Ian Gardner, who runs the Balmoral guesthouse in the town. If people see it as being "overrun" by asylum-seekers then they might "think 'I'll try somewhere else this year'".

Levels of crossness and quantities of migrants do not necessarily go together. The Home Office has put some asylum-seekers in places such as Snowdonia, Merseyside and Skegness (which has received more since a refugee-processing centre in Kent closed at the end of 2022), but many other areas house far more. "Some constituencies literally have thousands," says Matt Warman, Skegness's Conservative MP. Yet because the total number of hotels in the town is small, says Mr Warman, the effect of those few migrants on the public mood is "disproportionate".

It is worth being cautious about that word "hotel", however, with its connotations of crisp white sheets and attentive concierges. That is misleading. Asylum hotels are often closer to prisons with pebble-dash. Front doors are shut and locked; net curtains are drawn; a "NO VACANCY" sign flashes in one window. Ring the bell and you will find the door answered not by an eager bellhop but by a security guard in black; he is very unlikely to invite you in for canapés.

All this is nonetheless too much luxury for some. In Merseyside a far-right group is reported to have distributed leaflets lamenting "5-star hotels for migrants whilst Brits freeze". In Skegness one elderly lady recalls with satisfaction that she recently steered her shopping trolley into some asylum-seekers who were standing in her way and had not moved upon request. She thinks Britain should "send them all home". Bracing is one word for it. ■



And they think the foreigners look strange

Bagehot | The Brexit Re-enactment Society

In its approach to the Retained EU Law Bill, Parliament relives past blunders

Historical re-enactment is a popular pastime in Britain. Caps, tunics and boots are recreated with loving care; only the paunches and wheezing dismounts of the combatants intrude on the illusion. Fans of the genre should make their way to the public gallery of the House of Lords this month. Their lordships are reluctant participants in a faithful recreation of the events of spring 2017, when, in a headlong charge, Parliament legislated to begin the Brexit process and the invoking of the EU's exit clause.

The House of Lords is scrutinising the Retained EU Law (Revocation and Reform) Bill, an extraordinary attempt to scrub out European law at a stroke. Lawmakers know that the bill is dangerous, wasteful and, as Lord Liddle, a Labour peer, puts it, "one of the silliest pieces of legislation ever to come before Parliament". All the same, it cleared the Commons with only minor technical amendments, and is likely to become law. That sense of vertiginous unease is back. Parliament is again galloping towards an avoidable blunder. Welcome to the Brexit Re-enactment Society.

The bill is the legacy of Jacob Rees-Mogg, Boris Johnson's business secretary. Though he now sits on the backbenches, his creation has survived the fall of two prime ministers. The bill seeks to undo a careful settlement. When Britain left the EU, the legal chaos that might have followed was averted through a Herculean effort. The great body of European law was preserved in the domestic statute book and refashioned for a stand-alone country through 80,000 legal amendments. The idea was that Parliament would then gradually lay new British laws over old European ones, as it crafted its own regulatory regimes.

Instead, Mr Rees-Mogg's bill will liquidate the whole lot. At midnight on December 31st 2023, this body of retained EU law will be revoked; before then, ministers will be granted sweeping powers to preserve what they like or to amend legislation as they see fit. It is like lighting a fire in a library, and handing the librarians a photocopier and marker pen to save what they can.

Since ministers don't precisely know how many laws are in scope—at least 3,700, but maybe more—scores could be revoked inadvertently. The bill hands the executive broad powers to make laws, with little clue as to how that power might be used. Courts will be encouraged to disregard old case law based on European statutes; the Treasury fears it could lose billions in tax challenges if the definition of "business" is reopened. The proposed law will not be a vehicle for regulatory nimbleness, as ministers claim, but an almighty time-sink. America and Europe will spend the year writing the rules of the future, on semiconductors and artificial intelligence; Britain is poised to bury itself in last century's laws on pig meat, coal and steel.

Why does such a transparently bad bill stand such a good chance of being passed? Partly because of the vanity of those for whom the battle to leave the EU was the highlight of their careers, and who hanker to relive it. And partly because Parliament itself is imprisoned by the shrill, revolutionary politics of Brexit. The 2016 referendum and the schism that followed traumatised parliamentarians who still fear being accused of defying the popular will.

Mr Rees-Mogg says that retained EU law is alien, and dismisses critics as opponents of Brexit itself. He has a re-enactor's eye for detail, and his bill carefully recreates some of the most damaging features of the Brexit process. The use of a blunt deadline is the most obvious. When Britain invoked Article 50 in 2017, it set in train a two-year countdown with a gaping legal vacuum at the end of it. That stacked the negotiation to the EU's advantage and sent British politics into meltdown. A sane country would never allow itself to be put in such a vice again. Yet because ministers regard the end-of-year deadline as a means of shocking Whitehall into action, Britain is poised to inflict this instrument of torture on itself a second time, quite voluntarily.

The Retained EU Law Bill was propelled through the Commons with a familiar mix of terror and irresponsibility. Rishi Sunak, the prime minister, today reprises the role of Theresa May, by adopting the policies of the Eurosceptic right to whom he owes his majority. As in 2017, moderate Conservative MPs can see a looming crunch but fear splitting their party further. As in 2017, civil servants will be left to pick up the pieces; if they fail, they are the ones who will get it in the neck. As in 2017, a blithe optimism smothers the debate: how hard can sifting a few laws be? To be a gloomster is still the worst sin in the Tory party.

Theirs is to reason why

Many MPs hope the Lords will do their job for them. They may be disappointed. The Lords are empowered to make amendments and delay bills, and could send the bill into a lengthy tug-of-war with the Commons. Proposed Lords amendments include pushing the revocation date back by years and excluding fields of law from the threat of deletion. But the Labour Party is also wary of being painted as opposing Brexit and has little incentive to save Mr Sunak's government from a quagmire of its own making. The majority for more radical surgery in the Lords may not be there; Labour's more modest proposal is to give the Commons a final say before laws are axed. As in 2017, the Lords may find themselves alarmed but paralysed.

That would be a terrible mistake. It is for egregious bills such as this that a revising chamber exists. A parliament that passes a bad law today for fear of being out of step with public opinion from 2017 would find itself at odds with public opinion in 2023. There is no flag-waving crowd of Brexiteers at the gates; a clear majority of Britons thinks the decision to leave was a mistake. Throttling this bill would break the spell of the Brexit years, which causes sound politicians to surrender their judgment. Parliament would start thinking for itself again. Mr Rees-Mogg may wish to recreate yesterday's cavalry charge. It is time for others to draw in the reins. ■

The future of the car

Driven away

CHICAGO

Around the world, the young seem to be falling out of love with cars

FOR ADAH CRANDALL, a high-school student in Portland, Oregon, a daily annoyance is family members asking when she is going to learn to drive. Ms Crandall, who is 16, has spent a quarter of her life arguing against the car-centric planning of her city. At 12 she attended a school next to a major road down which thousands of lorries thundered every day. When a teacher invited a speaker to talk about air pollution, she and her classmates were galvanised. Within a year, she was travelling to Salem, Oregon's capital, to demand lawmakers pass stricter laws on diesel engines.

Yet her family still nags her to get her driver's licence. "[It's] seen as this ticket to independence. It's so glorified," she says. Ms Crandall admits her life would be easier if she had access to a car—she would spend less time on buses, and could drive to the coast with her friends. But she hates the idea that she should have to. "Why in our society is our identity so tied to car use?" she asks. "If I choose to comply and get my driver's licence it would be like giving in."

Few technologies defined the 20th century more than the car. On the surface, the love affair with the personal automobile continues unabated into this century. The number of drivers on the world's roads continues to rise almost everywhere. The distance driven by American motorists hit a new peak last year, according to data from the Federal Highway Administration. But there are hints that this is changing. People like Ms Crandall show why. Getting a driving licence was once a nearly universal rite of passage into adulthood. Now it is something that a growing minority of young people either ignore or actively oppose, into their 20s and beyond.

That, in turn, is starting to create more support for a anti-car policies being passed in cities around the world. From New York to Norway, a growing number of cities and local politicians are passing anti-car laws, ripping out parking spaces, blocking off roads and changing planning rules to favour pedestrians over drivers. Anne Hidalgo, the socialist mayor of Paris, boasts of "reconquering" her city for its residents.

Campaigners detect a sea change. Even a few years ago "there was a sense that we were the weirdos," says Doug Gordon, a founder of "The War on Cars", a podcast based in New York. Now, he says, "more and more elected officials are adopting positions that were [until recently] on the fringe." After a century in which the car remade the rich world, making possible everything from suburbs and supermarkets to drive-through restaurants and rush-hour traffic jams, the momentum may be beginning to swing the other way.

Start with the demography, and in the country most shaped by the car. The average American driver goes much farther every year than most of his or her rich-world contemporaries: around 14,300 miles (23,000km) in 2022, which is about twice as far as the typical Frenchman. Nearly a century of road-building has resulted in sprawling cities, in which it is hard to get around in any other way. The city of Jacksonville, Florida, for instance, spreads across 875 square miles. With around 1m residents, that makes it only about twice as densely populated as the whole of England, only around 8% of which is classified as "urban".

In the suburbs I learned to drive

The Supreme Court said in 1977 that having a car was a "virtual necessity" for anyone living in America. By 1997, 43% of the country's 16-year-olds had driving licences. But in 2020, the most recent year for which figures are available, the number had fallen to just 25%. Nor is it just teenagers. One in five Americans aged between 20 and 24 does not have a licence, up from just one in

12 in 1983. The proportion of people with licences has fallen for every age group under 40, and on the latest data, is still falling. And even those who do have them are driving less. Between 1990 and 2017 the distance driven by teenage drivers in America declined by 35%, and those aged 20-34 by 18%. It is entirely older drivers who account for still increasing traffic, as baby-boomers who grew up with cars do not give them up in retirement.

A similar trend is well-established in Europe. In Britain the proportion of teenagers able to drive has almost halved, from 41% to 21%, in the past 20 years. Across the countries of the European Union there are more cars than ever. Yet even before the covid-19 lockdowns emptied the roads, the average distance travelled by each one had fallen by more than a tenth since the turn of the millennium. (The exceptions were relatively new member states such as Poland.) Even in Germany, where the internal-combustion engine is an economic totem, drivers are pushing the brakes.

The trend is especially strong in big cities. One study of five European capitals—Berlin, Copenhagen, London, Paris and Vienna—found the number of driving trips made by working people was down substantially since a peak in the 1990s. In Paris the number of trips made per resident has fallen below the levels of the 1970s.

No one is entirely sure why young adults are proving resistant to the charms of owning a set of wheels. The growth of the internet is one obvious possibility—the more you can shop online, or stream films at home, the less need there is to drive into town. One British report, led by Dr Kiron Chatterjee at the University of the West of England, and published in 2018, fingered a rise in insecure or poorly paid jobs, a decline in home ownership, and a tendency to spend longer in education. The rise of taxi apps such as Uber and Lyft has almost certainly contributed as well, as have higher insurance premiums for young drivers. Driving generally is more expensive. In America the average cost of owning a vehicle and driving 15,000 miles in it rose by 11% in 2022, to nearly $11,000.

Other reasons seem more cultural. One big motivator, at least for the most committed, is worries about climate change. Donald Shoup, a professor at the University of California, Los Angeles, who has campaigned against the excessive provision of free parking in America, says he is surprised by how climate change has spurred many young activists to start campaigning against development focused on cars (he had thought that local air pollution, or the cost, would have made the case instead).

The falling popularity of cars among the under-40s chimes with the mood among city planners and urbanists, who have been arguing against cars for over two decades. Sometimes they have managed to get big, bold policies passed, such as the introduction of congestion-charging zones in the middle of London, Milan and Stockholm, under which drivers must pay a fee to enter. All three schemes have managed to cut traffic substantially and consistently. (A much-delayed and bitterly contested congestion-pricing scheme in New York could start later this year.)

So move your feet from hot pavement

But in most cases, the squeeze on motorists has been slower and more gradual. In Britain many local councils have begun to introduce "low-traffic neighbourhoods", blocking off streets to discourage passing drivers from taking shortcuts between main roads. In 2020 Oslo, the Norwegian capital, finished removing almost all on-street parking spaces from its city centre. Paris's drastic drop in traffic volume has been partly forced by policies brought in by Ms Hidalgo, who has removed parking, narrowed streets and turned a motorway that used to run along one bank of the Seine into a park. In 2021 she announced plans to redevelop the Champs-Élysées to reduce the space given over to cars by half, in favour of making room for pedestrians and urban greenery.

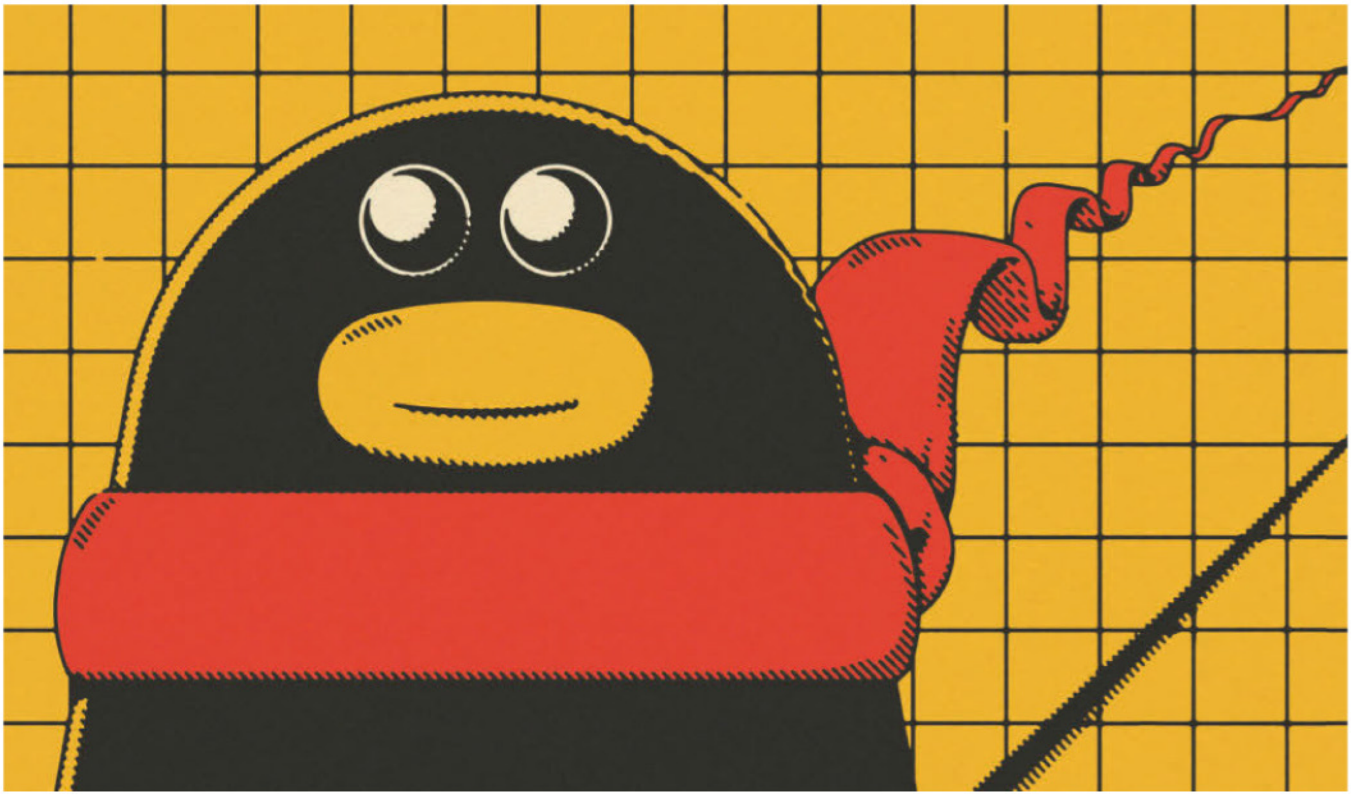
In America, New York has banned cars from Central Park, and experimented with banning them from some streets in Manhattan too. In the past few years dozens of American cities, including Minneapolis in 2018 and Boston in 2021, have removed rules that compel property developers to provide a certain amount of free parking around their buildings. California has removed such rules across the whole state, at least for buildings that are relatively close to public transport.

In the past, such changes have often been imposed from above. Increasingly they are finding favour with at least some voters. "Chicago for 80 years has been: cars first, everyone else dead last," says Daniel La Spata, an "alderman" (or city council member) in the north-west of the city. Now, he says, cycling activists are playing a big role in the city's local elections. In Oxford, in England, residents in favour of one traffic-reduction scheme manned barricades to stop irate drivers pushing the barriers aside. Ms Hidalgo won a second term as mayor in 2020 on a platform that included plans to turn Paris into a "15-minute city", a fashionable idea in which each *arrondissement* would have its own shops, sports facilities, schools and the like within a short walk or bike ride.

As the example in Oxford shows, not everyone is keen. In Hackney, in north London, the council had to install special vandalism-proof screens on the cameras that spot motorists who break the rules. One local councillor received death threats. Chats on Nextdoor, a neighbourhood-focused social-media app, are full of angry disputes and diatribes about the measures. In Oslo the plan to remove parking spots was denounced by one politician as a "Berlin Wall against motorists", and a local trade group said it would lead to a "dead town". (So far, it has not.)

Political opposition could put the brakes on the growth of anti-car policies. In New York it is suburban politicians, whose constituents are more dependent on cars, who have resisted the new congestion charge. In Berlin the centre-right Christian Democrats have campaigned in local elections on a platform of protecting the freedom to drive. Another worry is that as city centres freed from cars become more attractive, they also become more expensive—pushing some, especially families, out to suburbs where they need cars after all. In America housing in the most walkable neighbourhoods now costs 34% more than it does in sprawling places, according to one study. New technology might change things too. Electric cars may blunt climate-change concerns. They are cheaper to run than fossil-fuelled vehicles, which could encourage more driving.

But in the parts of Europe where anti-car policies have been in place for the longest, they appear to have worked like a ratchet. Giulio Mattioli, a transport professor at Dortmund University, notes that almost nowhere in the world that has removed a big road, or pedestrianised a shopping street, has decided to reverse course. "Once people see [the benefits], they generally don't want to go back." Several studies, including Dr Chatterjee's, have concluded that driving habits that are formed in youth seem to persist, with those who begin to drive later continuing to drive less, even into their 40s. If that pattern holds, the 21st century might just see the car's high-water mark. ■



Business in China

Unleashed, sort of

SHANGHAI

What Tencent's rebound says about prospects for China's big tech

Perhaps no company embodies the ups and downs of Chinese big tech better than its biggest tech firm of all—Tencent. Two years ago the online empire seemed unstoppable. More than a billion Chinese were using its ubiquitous services to pay, play and do much else besides. Its video games, such as "League of Legends", were global hits. Tencent's market value exceeded $900bn, and the firm was on track to become China's first trillion-dollar company.

Then the Communist Party said: enough. Xi Jinping, China's paramount leader, decided that big tech's side-effects, from distracted teenagers to the diversion of capital from strategic sectors such as semiconductors, were unacceptable. Tencent was, along with the rest of China's once-thriving digital industry, caught up in a sweeping 18-month crackdown. Regulators declared video games to be "spiritual opium", and barred under-18s from playing more than three hours a week. Tencent's new titles were held up by censors. At the same time, it was forced by trustbusters to tear down the walls of its apps to let other payment processors in. Last year it transferred all $36bn-worth of its stakes in JD.com and Meituan, two e-commerce firms, to shareholders as a dividend—in part perhaps to prop up its share price but possibly also to allay official concerns about its ubiquity. To make matters worse, Mr Xi's draconian zero-covid policy infected Chinese consumers with a bad bout of thrift. In the third quarter of 2022 Tencent's revenues declined by 2% year on year, its worst performance on record. By October its market capitalisation had collapsed to less than $250bn.

These days things are looking up for China's internet companies. Shoppers are "revenge spending" their way out of zero-covid. Regulators are easing off firms' old businesses and giving them room to toy with new ones. And Tencent, whose market value has doubled in the past three months (see chart 1 on next page), is once again the embodiment of the changing mood. If you want to understand what all this says about the future of China's digital economy, look to its humbled champion.

Tencent has no equivalent in the West, or anywhere else outside China. It is part Meta, part PayPal, part Epic Games (in which it owns a big stake), with a bit of Amazon and SoftBank thrown in (Tencent offers e-commerce and cloud services, like the American giant, and, like the Japanese one, has made hundreds of tech investments globally). The disappointing third quarter notwithstanding, it is expected in March to report annual sales for 2022 of more than $80bn. Roughly a third each comes from gaming, business services (which include payments, e-commerce and cloud computing), and social media and advertising. Its pre-tax profit is expected handily to exceed $30bn. If you exclude banks and energy companies, which had a bumper 2022, only a handful of firms in the world did better.

The linchpin of Tencent's riches is its WeChat super-app. Companies around the world have for years attempted to ape its astute marriage of pay (the transaction

→ Also in this section

58 The green-subsidy race
58 The Adani empire's state
59 A K-pop takeover
59 Disney bobs up and down
60 Bartleby: Say no to coffee meetings
61 Schumpeter: Whizzy defence tech

economy) and play (the attention economy). Few have succeeded in doing so as seamlessly as Tencent—and none on anything like the same scale. Last month's lunar-new-year celebrations are a case in point. During the weeklong festivities WeChat users sent loved ones 4bn digital *hongbao* (red envelopes that in the real world come stuffed with cash), and more people tuned in to the annual new-year gala on WeChat's newish Channels video platform (190m) than on Douyin, TikTok's popular Chinese sister video app (130m).

The new-year blowout hints at where Tencent is headed. The rise of Douyin has, like that of TikTok in the West, pushed digital life towards short-video sharing. In the past year the average Chinese spent more hours on such platforms than anywhere else online (see chart 2). Short-video apps are becoming the centre of China's attention economy—and of its digital-ads business, which generated $35bn in sales in the third quarter of 2022, according to Bernstein, a broker. Between July and September short-video platforms claimed a quarter of those ad dollars; their ad sales jumped by 34%, year on year.

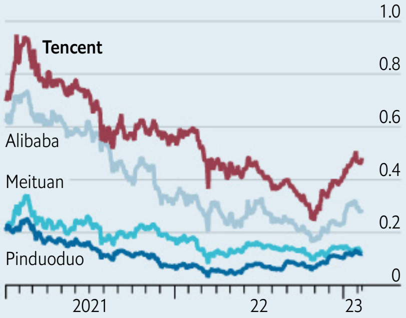
Tencent is eyeing a slug of that growth. The ranks of Channels users trebled last year, it says. Although it declines to give a total figure, its new-year-gala streaming tally suggests they now number in the hundreds of millions. Tencent occasionally hires big names to draw in new viewers; last June the Backstreet Boys, an American pop group, entertained 44m fans at a Channels concert. But it has adopted a more ecumenical approach to talent than Douyin. Content creators with as few as ten followers can get a slice of Channels' ad revenues. On Douyin, they need 10,000 fans to start earning money this way. Tencent hopes its strategy will attract more up-and-comers, more viewers—and more advertisers. The firm could bring in another 30bn yuan ($4.4bn) in ad sales within a few years, reckons Robin Zhu of Bernstein.

Tencent is reorienting the "transaction" parts of the WeChat economy around Channels, too. Notably, it is equipping the platform for "social commerce". This peculiarly Chinese form of consumerism, which combines live-streamed shows with shopping, is expected to fuel $720bn-worth of transactions this year. Here, too, short-video apps are taking market share from incumbents, such as JD.com and China's biggest e-emporium, Alibaba.

Tencent used to steer clear of this business, perhaps worried that its entry would hurt the value of its stake in JD.com. Rid of it, Tencent has appeared much more willing to try its luck in online shopping. It will not disclose how much money changes hands on its e-commerce platform. But, it says, the figure ballooned nine-fold, year on year, in 2022. WeChat Pay takes its usual 0.6% cut from each transaction. And despite the government's edict on letting in rival payments systems, most transactions on WeChat involve WeChat Pay: both Tencent and Alibaba, which operates the other popular service, have made cross-platform payments possible but cumbersome.

Sparing the messenger

Market capitalisation, $trn



Source: Refinitiv Datastream

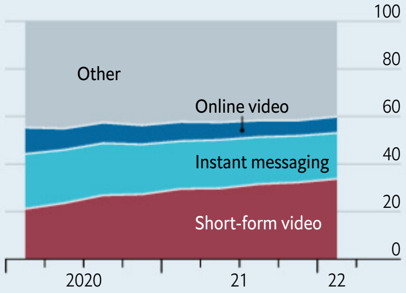
The shift to Channels is crucial for Tencent. The authorities' anti-gaming stance makes it urgent to look elsewhere for growth. Pony Ma, Tencent's founder, recently described Channels as "the hope of the company". Its recent success suggests this hope might not be forlorn. Tencent's share of revenues from its non-gaming businesses has been edging up. But to thrive in the new normal, where the government has put limits on some digital activities, and stands all too ready to place more, Tencent must deal with three challenges—as will China's other digital giants.

The first of these has to do with ensuring a nimble company culture that can adjust to the new reality. As tech founders go, Mr Ma is low-key and laid-back. This has empowered subordinates, such as WeChat's creator, Allen Zhang, and led to many successful businesses. But it also introduces friction when those subordinates have different ideas. Mr Zhang, for instance, has resisted the app's encroaching commercialisation, fearing it will spoil the user experience. As a result, WeChat's home screen has remained unchanged for a decade and accessing videos on Channels requires two taps—not a chore, but a drag compared with Douyin, which plies you with clips as soon as you open the app. The same resistance to change explains why the e-commerce operations, too, will be rolled out only gradually, notes Clifford Kurz of S&P Global, a research firm.

Video killed the gaming star

China, time spent on mobile apps

By platform, % of total



Sources: iResearch; S&P Global Ratings

Any foot-dragging could prove a problem, considering that tech firms will find themselves competing with each other more—the second challenge. Mr Xi's techlash has bulldozed the playing-field in swathes of the digital economy. This is creating new rivalries. Meituan is pushing from food delivery into ride-hailing and e-thrift-stores, which have been the preserve of rivals such as Pinduoduo. Douyin's owner, ByteDance, will soon launch a food-delivery service of its own and is experimenting with a messaging app that looks strikingly similar to WeChat. Alibaba, Tencent and Baidu, China's biggest search engine, are all developing artificial-intelligence (AI) chatbots similar to ChatGPT, whose humanlike conversational powers have beguiled Western internet users of late.

The last thing that could trip up Tencent, or its rivals, is politics. Although it has declared the tech crackdown over, the state remains a spectral presence. It is taking small stakes in subsidiaries of the biggest tech titans, including Alibaba and, reportedly, Tencent. As Sino-Western tensions mount, closeness with the state could hurt foreign earnings, for example from Tencent's international gaming business. At home, cyberspace, media and antitrust agencies have gained new powers—and are willing to wield them. Censorship, always part of Chinese life, is intensifying as Mr Xi entrenches his strongman rule, which could mean more delays to Tencent's games launches. And the danger of the party paralysing a firm's growth is ever present. On February 9th share prices of Chinese AI firms fell after state media warned that "some new concepts" (like chatbots) were getting too much attention.

Short videos have so far been spared the party's rod. Though they face fewer restrictions than games, this could change if Mr Xi concludes that being glued to Douyin or Channels instead, which is how young erstwhile gamers spend two-thirds of their newly free time, is not conducive to moulding good communists.

Mr Ma has repeatedly stressed how Tencent's universe of apps "served society" and "assisted the real economy". Such words should be catnip to Mr Xi and his cadres. Investors are certainly purring. Yet greater competition and fickle government are likely to constrain Tencent's prospects. In China there is no more room for digital winners—only survivors. ■

Business and the climate

Shock therapy

BERLIN

What European companies make of the green-subsidy race

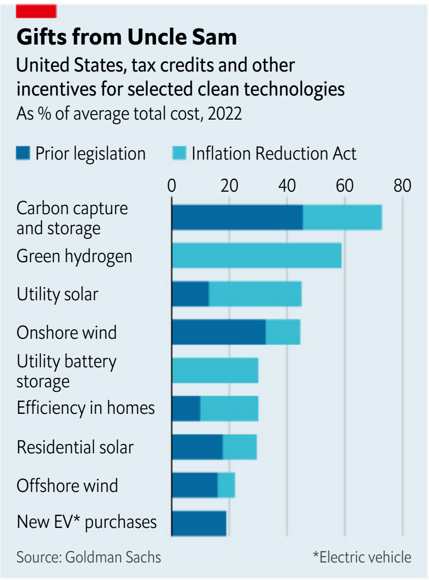
LAST SUMMER European leaders began hearing a huge sucking sound. The source of the din? The Inflation Reduction Act (IRA), a 725-page law passed in August to speed up American decarbonisation. Europe's budding clean-tech industry, they feared, would be hoovered up across the Atlantic by the promise of handouts, which amount to around $400bn over ten years. To stop this happening, some EU politicians argued, the bloc would have at the very least to match the IRA's sums.

So far the noise has turned out to be mostly in the politicians' heads. Worries about a green exodus have subsided. When the continent's heads of government gathered recently in Brussels, they did not shower billions of euros more on the EU's greening efforts—which are already comparable to the IRA in their generosity (see Finance & economics section). Nor did they (for now) further water down rules against state aid, which would have encouraged member states keen to splurge. Instead, they focused on making the system for doling out the cash more efficient.

In the eyes of its European fans, the beauty of the IRA is less its size than its simplicity. Rules are the same all over America. Getting tax credits, grants or soft loans will be straightforward provided a firm meets the criteria, such as investing in a targeted sector. The law sets aside sums for specific technologies, such as solar energy or carbon capture and storage (see chart). Producers of "green" hydrogen, made with renewable power, can get tax credits of up to $3 per kilogram of the gas.

Replicating this set-up exactly would be unthinkable in Europe. The EU may see itself as an ever-closer union, but taxes are still a national affair, which rules out continent-wide tax incentives. If member states want to offer their own credits, or other subsidies, they typically need the approval of the European Commission, whose job it is to ensure a level playing-field in the EU's single market. To the resulting cacophony of national schemes, the EU has recently added a few bloc-wide grant programmes, such as InvestEU and Innovation Fund, to support clean tech.

The result is jarring, particularly for smaller companies in need of funds to scale up their projects, says Craig Douglas of World Fund, a venture-capital firm, who has long experience in dealing with the EU's subsidy bureaucracy. To have a chance at tapping one of the many pots, startups often have to hire pricey consultancies to help them write grant proposals. "We would need at least four people full-time to figure this out," explains Vaitea Cowan, co-founder of Enapter, a maker of electrolysers, machines that produce hydrogen.



Gifts from Uncle Sam

United States, tax credits and other incentives for selected clean technologies

As % of average total cost, 2022

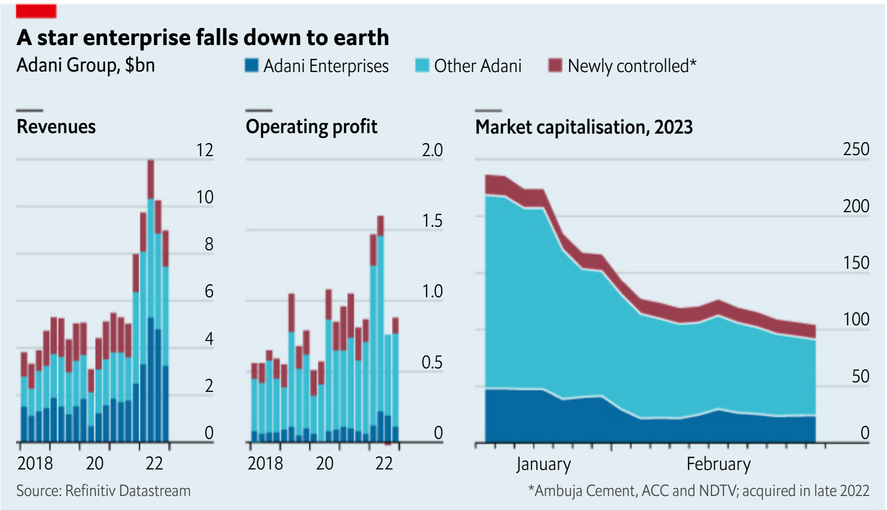
Source: Goldman Sachs

*Electric vehicle

Once an application is filed, it can take months, or years, before a decision is made. In the case of Plastic Energy, which recycles plastic waste, it once took so long that "we had to file again because the delay made us miss a deadline", reports Carlos Monreal, its boss. Decisions tend to come without explanation. "It's a black box. There should be a dialogue," says Henrik Henriksson, CEO of H2 Green Steel, which is erecting a steel mill in northern Sweden powered by green hydrogen. And the EU's green subsidies are often poorly targeted. Jules Besnainou of Cleantech for Europe, an industry body, notes that most of the money goes not to the continent's startups, which tend to be more innovative, but to big established firms, which do not always need government support.

The commission's draft "Green Deal Industrial Plan", unveiled on February 1st, tries to deal with these shortcomings. The plan is meant to simplify the EU programmes and streamline the approval of national green-finance tools in Brussels. It proposes an "administratively light" auction for green-hydrogen producers: winners will receive a premium, based on their bids, for each kilogram of the gas produced over ten years. The scheme will offer incentives to the tune of €800m ($860m). The IRA has clearly shocked the EU into thinking harder about its green subsidies, says Jeromin Zettelmeyer, who heads Bruegel, a think-tank in Brussels.

That may be so. Still, those who have read the eight pages dedicated to "speeding up access to finance", which mention no fewer than a dozen different acronym-rich programmes, may be excused for not holding their breath. Claudio Spadacini, CEO of Energy Dome, an Italian firm which uses liquid carbon-dioxide to store energy, approves of the EU's moves but still hopes to take advantage of the IRA. Ms Cowan of Enapter, whose firm has just built a factory in Germany, is getting lots of calls from American state governments since the IRA was passed. "They are rolling out the red carpet," she says. Whoosh. ■



A star enterprise falls down to earth

Adani Group, $bn

Source: Refinitiv Datastream

*Ambuja Cement, ACC and NDTV; acquired in late 2022

The empire's state

On February 14th Adani Enterprises reported robust earnings. Its ports-to-power parent conglomerate had a solid 2022. Not solid enough to reassure investors: the Indian group's market value is down by $130bn since a short-seller accused it of fraud last month (which the group denies). Its rebuttal of the charges has slowed but not arrested the slide. To preserve cash, Adani will reportedly halt some capital spending.

Entertainment (1)

K-popoly

SINGAPORE

A corporate liaison at the heart of the Korean music business

FANS OF SOUTH KOREA'S wildly successful pop industry are used to the intrigue surrounding new groups, band members' romances and their misbehaviour. Now a new source of K-pop drama has emerged from an unexpected quarter. On February 10th HYBE, an entertainment house which represents the genre's biggest name, BTS, agreed to buy a 14.8% stake in SM Entertainment, a rival, from its founder and former chief producer, Lee Soo-man. Mr Lee, who is no longer involved in his firm's day-to-day business, would be left with roughly 4%, making HYBE its largest shareholder. In pursuit of an even closer tie-up, HYBE simultaneously launched a tender offer to buy another 25% at a similar premium to the shares' market price that it is paying Mr Lee. SM Entertainment says it will resist any attempt at a hostile takeover. The stage is set for a corporate showdown worthy of any pop feud.

HYBE and SM Entertainment are the two largest listed K-pop companies, with a combined market capitalisation of nearly $9bn. A full merger would create an industry powerhouse, capturing a large chunk of South Korea's music-production business. SM Entertainment is particularly strong in talent-scouting. Three years ago it established its own school in Seoul, which now offers three-year courses in everything from vocals and dance to production. HYBE, for its part, dominates music distribution through Weverse, a digital platform that hosts exclusive content such as live-streamed concerts and lessons where BTS members teach foreign fans Korean.

Vertical integration is not unusual in Korean show business. JYP Entertainment, another K-pop house, has a TV-production subsidiary. YG Entertainment, another rival, runs a modelling agency. They take the raw material (an artist) and transform it into the finished products (content), using a finely tuned production process. As Lee Jang-woo of Kyungpook National University observes, this innovation strategy has a lot in common with South Korea's high-tech manufacturing industry. K-pop firms may learn as much from conglomerates like Samsung and Hyundai as from Western labels such as Warner and Universal.

For HYBE, combining with SM Entertainment would allow it to diversify away from BTS, notes Douglas Kim, an independent analyst of Korea Inc. This is especially important now that the supergroup has confirmed it will hit pause until 2025, while its seven members undergo the mandatory 18 months of military service. SM Entertainment's managers may worry that an investigation from Korean trustbusters, who must review any transaction involving more than 15% of shares, could be a distraction. They would rather pursue a partnership with Kakao, a Korean internet giant to which they had just sold 9% of their firm in newly issued shares.

That may not be enough to stop HYBE. SM Entertainment's share price is up by nearly 50% since the sale of Mr Lee's stake to HYBE was announced, implying that investors quite like the sound of a union. ■

Entertainment (2)

The Iger sanction

The boomerang CEO's big changes at Disney are not the end of the story

NELSON PELTZ is a man accustomed to winning. So when his hedge fund, Trian Partners, called off a proxy fight for a seat on Disney's board on February 9th, it was no surrender. A day earlier Bob Iger, Disney's newly returned CEO, announced sweeping changes to the entertainment powerhouse of the sort Trian had sought.

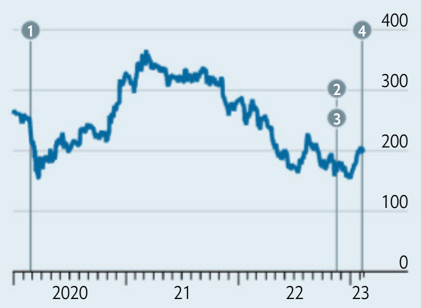
A new organisational structure will shift power from bean-counters back to creative teams. That reverses the changes under Bob Chapek, whom Mr Iger handpicked as successor in early 2020 and then replaced in November. Operating costs will be slashed by $2.5bn, with a further $3bn to be cut from content spending, together equivalent to 8% of expenses; 7,000 staff will go. To stanch financial losses at its Disney+ streaming service, in December Mr Iger raised subscription prices in America by 38%. Disney will sit out the "global arms race for subscribers", he says. Instead, he hinted that it may license more of its catalogue to competing platforms to juice profits. To top it off, Disney will restart paying out dividends by the end of 2023.

For all that, Mr Iger left several key questions unanswered. The first concerns Disney's long-term plan for streaming, which he has yet to articulate. Mr Iger has said he wants to focus on "core brands and franchises". Their online home is Disney+. He also wants to avoid "undifferentiated" general entertainment. That is the preserve of Hulu, a streamer two-thirds-

▸▸

Bobbing up and down

Disney, market capitalisation, $bn



①	Feb 25th 2020	Bob Chapek becomes CEO
②	Nov 20th 2022	Chapek ousted, Bob Iger returns
③	Nov 21st 2022	Trian stake revealed
④	Feb 8th 2023	Iger announces turnaround plan

Sources: Refinitiv Datastream; press reports owned by Disney. Disney's arrangement with Comcast, a cable giant that owns the remaining third, is set to expire in 2024. Hulu's slowing growth and deteriorating margins suggest that the status quo is no longer working. Comcast's boss indicated in September he would be open to buying Disney's stake "if it was up for sale". Mr Iger must decide whether to let go of Hulu's shows, which according to Parrot Analytics, a data firm, do better than those of Disney+ with older viewers and women, or to fork over around $9bn for Comcast's stake.

The second unresolved question for Disney relates to another part of its media empire, ESPN. The sports network has always been an uneasy fit with Disney's strategy, first laid out in 1957 by its founder, Walt Disney, of monetising creative franchises across several formats and distribution channels. Mr Iger's decision to split ESPN out as a separate business unit is a tacit recognition of its awkward position. For now, Mr Iger says Disney has no intention of spinning out ESPN. That may change if the firm decides to make another big acquisition, either of Hulu or, say, in the rapidly growing market for video games. Given Disney's hefty $40bn of net debt, proceeds from the sale of ESPN may be needed to help bankroll any deal.

That is a lot for Mr Iger to sort out in the 22 months he has left on his contract, during which he must also find an abler successor than Mr Chapek. Disney's market value of $200bn or so is up by 19% since his return, suggesting that investors have more faith in him than they did in the other Bob (see chart on previous page). But they may trust him less than they did his younger self: the firm is still worth $60bn less than when he retired in early 2020. ■

Bartleby Caffeine with Cassie

Time to get shot of the scourge of the coffee meeting

IF PEOPLE USED the time they currently devote to reading books about productivity hacks to do some actual work, their productivity problem would be solved. But occasionally these books contain nuggets of wisdom. In "Time Wise", Amantha Imber has a short chapter whose title alone gleams with good sense. It is called "Why you need to say 'no' to coffee meetings". That is splendid advice for anyone who can identify with the following situation.

An email arrives from someone you do not know, asking to meet for coffee. Such requests arrive fairly often. It might be someone starting out on their career who wants guidance on how to progress in your field. It might be a freelancer hunting for work. In this instance the sender, who is called Cassie and got your name from a colleague whom you vaguely know, thinks there may be a way for your two companies to work together.

You don't really want to meet Cassie. On the other hand, saying that you don't want to meet someone, ever, feels a little rude. The meeting is weeks away, and the diary looks clear. You do drink coffee. She might be a useful contact if you want to move jobs. And you have heard of her company: it is just possible something useful might come of a discussion. You ignore instinct and say "yes".

The morning of the meeting arrives and you see "Coffee with Cassie" in your calendar. Who the hell is Cassie? You find the email chain, curse yourself for agreeing to meet and wonder briefly about cancelling. Just then an email arrives from Cassie saying how much she is looking forward to coffee. Bollocks. You confirm the time and place, but say you only have time for half an hour.

You arrive at the coffee shop, and remember you have no idea what Cassie looks like. You introduce yourself to several other people, who are plainly all waiting for similarly aimless meetings, until you receive an apologetic text from Cassie to say that she is running late and will be there in five minutes. The one thing you are determined to get out of this coffee meeting is a coffee, so you order for yourself and find a table. In a victory of hope over experience you have brought a notepad: you write the date and Cassie's name and company at the top.

You text Cassie to say that you are sitting by the man in the pink sweater, who leaves almost immediately. Ten minutes later you see someone who is scanning the room at sweater height. You mouth each other's names like guppies in an aquarium. It's Cassie. She goes to get her own coffee, which takes another five minutes. The coffee meeting is halfway done and there has yet to be a meeting.

Cassie sits down. Ritual demands an exchange of platitudes. You swap information that will be of no use to anyone ever: how late in the day you can drink coffee before it disrupts your sleep, how many days a week you now spend in the office, how she knows your colleague. Then you confirm things that were already known to both of you (what roles you are in) and add unnecessary detail (how long you have been in your job).

There is now about ten minutes left on the clock. You prompt Cassie to say a bit more about those opportunities she raised back when this seemed like a good idea. She says something about a data set that you might be interested in. You say something about analytics, just because it makes you seem mildly innovative. She volleys back a reference to AI. You suspect that neither of you really knows what is going on. You are aware that the notepad in front of you is still damningly blank, so you write down "data analytics" and "AI" just to signal that this could be leading somewhere.

Your coffee is drained and the 30 minutes have passed. You say you have to go. While you wait—and wait—to pay, you share a bit more useless information for good measure: where you are both going next, how long Cassie is in town for. You can almost feel your neurons deciding that there are no memories here that are worth forming. You both agree that it has been really good to meet, even though it hasn't, and that you will be in touch, even though you won't.

Not every meeting request is a dud. Giving advice to youngsters, say, is usually the right thing to do (though the types of youngsters who ask for advice are not usually the ones who need help). The problem is the coffee. Ms Imber's recommendation is to forgo the caffeine and schedule a call during a period of dead time such as a commute. The time may be used fruitfully; if it is not, it will not feel as wasted. In the matter of coffee and meetings, the blend is the problem.

Schumpeter | The data geeks of war

Ukraine is a testing ground for America's AI-wielding defence-tech industry

MUCH OF THE Western military hardware used in Ukraine sounds familiar to any student of 20th-century warfare: surface-to-air missiles, anti-tank weapons, rocket launchers and howitzers. But Ukraine's use of Western information technology, including artificial intelligence (AI) and autonomous surveillance systems, has also had a powerful, if less visible, impact on Russian forces. Commercial vendors supply Ukrainian troops with satellites, sensors, unmanned drones and software. The products provide reams of battlefield data which are condensed into apps to help soldiers on the ground target the enemy. One American defence official calls them, appreciatively, "Uber for artillery".

Behind this new form of warfare are some of the most unconventional minds in American tech. Everyone knows about Elon Musk, whose rocket company SpaceX put Starlink satellites at the service of Ukraine (though he has now restricted access from the battlefield). Your columnist recently met two other iconoclastic entrepreneurs. One is Palmer Luckey, a 30-year-old who in 2017 co-founded Anduril, a maker of surveillance towers, drones, unmanned submarines and an AI-driven system that supports them, called Lattice. With his trademark flip-flops, Hawaiian shirts and goatee, he is an atypical defence contractor (Tony Stark, Marvel's gadget-obsessed "Iron Man", springs to mind). Yet the startup is already shaking up the traditional model of military procurement in America. In its short life, it has won contracts in America and Australia. It provides autonomous systems to Ukraine. When it last raised money in December, it was valued at $8.5bn.

The other is Alex Karp, an eccentric doctor of philosophy with an Einstein-like mop of hair. (Mr Karp used to sit on the board of *The Economist*'s parent company.) Palantir, his Denver-based software firm, builds digital infrastructure to help clients manage lots of data, be it on security threats, health-care systems or factories' productivity. Like SpaceX, it has blazed the trail for civilian-military ventures since he co-founded it two decades ago. He makes bold claims. Palantir, he says, has changed the way Ukrainian troops target the enemy, and even the nature of counter-terrorism. He credits its software with saving millions of lives during the covid-19 pandemic. It may not all be gospel truth (the description of British journalists he delivers while staring at Schumpeter—"bad teeth, hard questions"—is only half true). Yet there is little doubt Palantir is supporting Ukraine both on the ground and as part of NATO's intelligence network. On February 13th, when it reported its first-ever quarterly profit and Mr Karp hinted that his firm might be an acquisition target, its market value rose to $21bn.

Both men are cut from similar cloth. They are Silicon Valley renegades. They criticise big tech for abandoning its historic link with America's defence establishment. They lament the fast pace of civilian-military fusion in China, which they see as a potential threat to the West. To a greater or lesser degree, they are linked to Peter Thiel, a right-wing venture capitalist. Mr Thiel chairs Palantir and his Founders Fund was an early backer of Anduril (both names echo his love of J.R.R. Tolkien). To some that makes them creepy. Still, using different business models, both highlight how sclerotic the traditional system of "prime" defence contracting has become. They offer intriguing alternatives.

Like a prime contractor, Anduril only sells to military customers. But unlike defence giants such as Lockheed Martin and Northrop Grumman, it does so while taking all the research-and-development (R&D) risk on its own shoulders. Mr Luckey is a born innovator. As a teenager, he invented the Oculus virtual-reality headset that he later sold to Facebook for $3bn. Walk with him through the arsenal of airborne and subsea devices on display at Anduril's headquarters in Southern California and his wonkishness as he explains the gadgetry is almost overwhelming.

His business acumen is no less sharp. He and his executives have no time for the Pentagon's traditional "cost-plus" procurement system. Though it may be necessary for big projects like fighter planes and aircraft-carriers, they say, in general it distorts incentives, creating a risk-averse, expensive and slow-moving defence juggernaut. Rather than waiting for government contracts, Anduril creates what it thinks defence departments need, and uses iterative manufacturing and a lean supply chain to make products quickly and relatively cheaply.

It is fiercely competitive. Compared with the prolix, PowerPoint-heavy bidding processes for prime contracts, Anduril relishes the cut-and-thrust of "shoot-offs", or competitions in which the Department of Defence (DOD) tests commercial products against each other. Its success rate is high. In 2020 it won a big contract to provide surveillance towers on America's border with Mexico. Last year it secured $1bn from the DOD to provide autonomous counter-drone systems. It is building underwater vehicles the size of buses to patrol waters off Australia. Though there is an element of the "America first" crusader about Mr Luckey, he leaves no doubt that he intends Anduril to be a big, profitable business.

Lords of the slings

Palantir has tentatively started to achieve that status, but with a "dual-use" business model. It works for private clients as well as governments (albeit only ones friendly with America). Both on the battlefield and in business, its software cuts through the thickening fog of data to enable quick decision-making. Other dual-use firms are increasingly winning defence contracts. The Pentagon's Defence Innovation Unit, set up in 2015, supports a big increase in the use of commercial technologies, such as AI, autonomy and integrated systems, to speed up the responsiveness to global threats.

Ukraine is a good testing ground. It is also a good simile. The struggle of tech Davids taking on America's military-industrial Goliath is not dissimilar to tech-enabled Ukrainian troops battling the turgid might of Russia. ■

Kumano Kodo Pilgrimage Routes

The art of living well in Japan

Time-honoured experiences that will carry you from where you are to where you're meant to be

Japan is a dynamic destination, one where you can immerse yourself in the organised chaos and vibrant streetscapes of one of the world's great cities, Tokyo. But it is also a place where you can elect to leave all of that behind, and instead seek out experiences that contribute to a greater sense of well-being and a more connected, centred sense of self. This could mean following trails into the mountains laid by mountain ascetics well over a thousand years ago, soaking outdoors in natural hot springs, or waking up to dewy vistas of rice paddies and forested hills.

While nature is an obvious place to seek sanctuary, it can be found, too, in Japan's man-made environment. Travel to Enoura Observatory, an expansive space designed by artist Hiroshi Sugimoto, or to the island of Shikoku, where contemporary architect Kengo Kuma has designed several wooden structures that blend in harmoniously with the natural environment. Then there's the food, and the numerous opportunities to taste the sublime: sample an ancient form of sushi on the shores of Lake Biwa at Tokuyamazushi, or a multicourse meal inspired by Japan's traditional organic farming culture at Tokyo hotspot NARISAWA.

Wellness and nature

Japan is full of awe-inspiring landscapes: metaphorical 'seas' of clouds settling among forested peaks; perfectly formed volcanic cones, iced with snow; and waterfalls plunging over dramatic cliffs, to name a few. Some are so awe-inspiring that they were viewed by ancient Japanese as sacred—a feeling that lingers to this day. For over a millennium, ascetic monks called *yamabushi* headed deep into the mountains, practicing austerities in the wild in search of enlightenment. The tracks they laid became pilgrimage routes, some of which still exist.

One example is Kumano Kodo, one of only two UNESCO-listed ancient pilgrimage routes in the world. Located on the remote Kii Peninsula, the trails run through ancient forests, past rivers and hot springs, connecting three temples that mark historic sights of nature worship. Once a sacred pilgrimage reserved for emperors and samurai, the Kumano Kodo is open to all wanderers today. It presents a spectacular opportunity to disconnect from modern life and seek something more transcendent.

So, too, is a stay at Sasayuri-Ann, deep in the mountains of Nara prefecture. Overseen by ascetic monk Tetsuji Matsubayashi, Sasayuri-Ann is composed of traditional wooden villas with thatched roofs and pine floors. Here, guests sleep on 'futon' bedding laid out on tatami straw mats, delighting in the tranquillity of the landscaped gardens and views beyond of the mountains and rice paddies spread out below. There are old *yamabushi* trails near here too. You can trek around the Akame 48 Waterfalls—voted the most beautiful waterfall landscape in Japan—and you may even see some modern-day ascetics clothed in traditional white robes.

Wellness and culture

Japan's traditional culture has long been shaped by the country's natural environment. Take architecture, for example: in a country with abundant forests, wood has long been the principle construction material, and carpentry an ancient art form. Kengo Kuma is one of Japan's leading contemporary architects, and a strong proponent of traditional design and materials. His works are noted for their use of wood, seen in his design for the new National Stadium, built for the recent Tokyo Olympics and also in his works for Yusuhara, a small town in the mountains of Kochi prefecture on the island of Shikoku. Since the 1980s, Kuma has designed six original structures for Yusuhara. Taking inspiration from the town's natural surroundings and history as a logging town, Kuma's designs incorporate cedar, thatch, and traditional carpentry techniques. While the buildings are unmistakably modern, they also have a distinctly Japanese feel, fitting naturally into Yusuhara's lush, forested landscape.

Another example of art and architecture blending in with and enhancing the natural environment is Enoura Observatory, perched on a hilly citrus grove in the Hakone Mountains not far from Tokyo. It's a project conceived by Hiroshi Sugimoto, a NYC-based contemporary artist. The complex—which includes a gallery, open-air theatres for noh (an ancient Japanese performing art) and a re-imagined traditional teahouse and gardens—makes use of the traditional building styles and methods at which local artisans have long excelled, preserving them for future generations. But there is also a contemporary edge. For example, one stage is made of glass atop a wooden framework while another is of stone. Each element is designed for interaction and harmony with the site's natural surroundings, resulting in a stunning piece of architectural art—complete with panoramic views over Sagami Bay.

Yusuhara+Town+Library

Optical Glass Stage and Winter Solstice Light-Worship Tunnel
©Odawara Art Foundation

Wellness and gastronomy

Japanese cuisine is so much more than just sushi and ramen. Recognised by UNESCO as an example of humanity's intangible cultural heritage, *washoku*—Japanese cuisine—is, at its heart, about eating seasonal, local ingredients produced in harmony with the environment. Renowned chef Yoshihiro Narisawa, whose Tokyo restaurant regular ranks among the best in Japan, has built his reputation around the concept of *satoyama*. In Japanese, 'satoyama' refers to the place where the fields meet the mountains—a common setting in country with an abundance of peaks—and a historically no-waste pastoral lifestyle that is as much about growing food and foraging as it is about tending to the natural environment. The result is signature dishes like 'Soil Soup 2001', which seeks to capture the very essence of terroir (it's made from burdock root).

While NARISAWA is an example of contemporary *washoku*, there are also restaurants in Japan that continue to honour age-old culinary traditions, like fermentation. The emphasis on freshness in sushi is a fairly modern one; historically, sushi was a means of preserving seafood through fermentation. At the northern tip of Lake Biwa, Japan largest lake, lies tiny Lake Yogo, and on the edge of this clear lake sits Tokuyamazushi, one of the last practitioners of an ancient fermentation method called *narezushi*. Chef Hiroaki Tokuyama packs fresh fish from Lake Yogo in steamed rice, leaving the mixture to ferment at a constant, cool temperature for months. Once completed, the *narezushi* is rinsed in cold spring water, thinly sliced and served on fresh rice. The flavour is a brilliant surprise—bright, clean and surprisingly mild, with a soft cheese note.

Japan. Endless Discovery. JNTO

www.japan.travel/en/luxury

Climate change

Going great guns

War and handouts have turbocharged the green transition

TO MANY ACTIVISTS, Lutzerath, an abandoned hamlet in Germany, symbolises the nightmare of the global energy crisis. For months campaigners blocked the site's demolition after Robert Habeck, the country's energy minister, allowed a utility firm to mine for lignite—the dirtiest form of coal—under its graffitied houses. As a giant excavator swallowed its way closer, hundreds of police, unfazed by the pyrotechnics propelled at them, dragged protesters from their stations. Now the village is empty; its last buildings gone. Only bits of *lutzi* (cables and roads) are left for the bucket-wheeled machine to gobble up.

In their panic to keep the lights on, politicians across Europe and Asia are reopening coal mines, keeping polluting power plants alive and signing deals to import liquefied natural gas (LNG). State-owned oil giants, such as the UAE's ADNOC and Saudi Aramco, are setting aside hundreds of billions of dollars to boost output, at the same time as private energy firms mint enormous profits. Many governments are encouraging consumption of these dirty fuels by subsidising energy use, to help citizens get through the winter.

Yet the reality is that the return of brown fuels is a subplot in a much grander story. By making coal, gas and oil scarcer and dearer—prices remain well above long-run averages, despite recent falls—Russia's invasion of Ukraine has given renewable power, which is mostly generated domestically, a significant strategic and economic edge. Indeed, even as Mr Habeck endorsed coal-mining last year, the Green politician set out plans to expand solar and wind energy, including in Lutzerath's gusty Rhineland. All over the world officials are raising renewables targets and setting aside huge sums to bankroll a buildout.

This complexity makes it difficult to discern whether the tumult in energy markets has aided or impeded the green transition. To assess the overall picture, *The Economist* has looked at a range of factors, including fossil-fuel consumption, energy efficiency and renewables deployment. Our findings suggest that the crunch caused by the war in Ukraine may, in fact, have fast-tracked the transition by an astonishing five to ten years.

As the battle at Lutzerath suggests, the main reason for alarm is that the world is burning more coal these days. Before the war, it seemed as if appetite for the fuel, having peaked in 2013, was in secular decline. Last year, however, consumption grew by 1.2%, surpassing 8bn tonnes for the first time in history. Sky-high gas prices have pushed utility firms in Europe and parts of Asia, notably Japan and South Korea, to use much more of the stuff. Politicians have prolonged the life of coal-fired plants, reopened closed ones and lifted production caps. This has led to a scramble ▸▸

→ Also in this section

66 Cobalt's sudden superabundance
67 Crypto scrutiny intensifies
67 Chinese tourism and capital flight
68 Buttonwood: Soft-landing mistakes
69 All change at the World Bank
69 America's economic nerve centre
70 Free exchange: Against isolation

for supply—one which has been exacerbated by Europe's ban on Russian imports. In China and India production jumped by 8% and 11% respectively in 2022, pushing world output to a record high.

The International Energy Agency (IEA), an official forecaster, predicts that coal demand will remain high until 2025 (though it cautions that soothsaying is particularly difficult in current market conditions). Europe will receive less gas from Russia, and global LNG supply is likely to stay tight, meaning coal will remain the bloc's fallback option. India's appetite will probably grow, adding to demand. But the rise will be tempered by an increase in the use of renewables—and beyond 2025 coal's fortunes look dim. New LNG projects in America, Qatar and elsewhere will kick in, providing relief to gas markets.

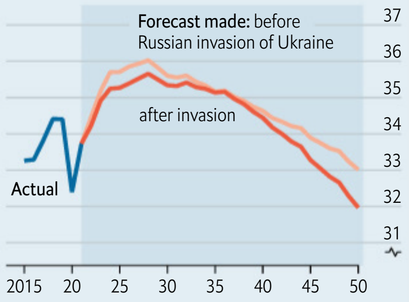
Meanwhile, the world's existing production capacity of both oil and gas is already close to being fully used. Russia cannot easily redirect gas exports; its oil rigs, lacking people and parts, may soon produce less than they do now. Although energy-hungry countries have been busy signing long-term deals to import LNG, which will force them to import the fossil fuel for several more decades, volumes remain modest. Hydrocarbon firms are enjoying juicy profits, but investment in new projects is falling. Such investment remains well below levels of a decade ago, and a dollar seems to go less far nowadays: capital expenditure per barrel of output, a measure of exploration and production costs, has risen by 30% since 2017. Sustained demand amid slowly rising, perhaps even falling, supply should keep prices of both oil and gas high.

Lofty prices have already led consumers and firms to reduce their reliance on fossil fuels. Last year the world economy became 2% less energy-intensive—measured by the amount of energy it uses to produce one unit of GDP—its fastest rate of improvement in a decade. Efforts to consume less are most apparent in Europe, which in recent months has been assisted by unusually mild temperatures. According to McKinsey, a consultancy, warm weather and greater energy efficiency mean the continent has used 6-8% less electricity this winter than in the previous one. And all over the world, capital is being mobilised on a vast scale to make the economy more frugal. Last year governments, households and firms together spent $560bn on energy efficiency. This money mainly went on two technologies: electric vehicles and heat pumps. Sales of the former almost doubled in both 2021 and 2022.

Hold fire

Global CO_2 emissions from energy combustion

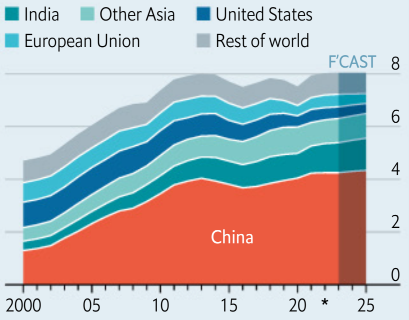
Gigatonnes



Source: S&P Global Commodity Insights

King coal

Global coal consumption, tonnes, bn



Source: International Energy Agency *Estimate

Smoke signals

But efficiency can only make so much difference. People are also looking to alternative sources of energy, especially in Europe. From December 2021 to October 2022 contract prices for the continent's wind and solar photovoltaic projects were on average 77% below wholesale power prices. At €257 per megawatt-hour (MWh), the average price in Germany in December, a typical solar plant takes less than three years to become profitable, against 11 years at €50 per MWh, the average spot price between 2000 and 2022. Globally, installations of rooftop solar panels, which households and firms use to trim bills, rose by half last year. A record 128GW of onshore-wind projects also broke ground, marking a 35% increase from the year before.

Such indicators only cover a fraction of the activity that has taken place since the war, because selecting a site, obtaining permits and designing large wind or solar farms can take many years. A more representative—and even more encouraging—metric is the amount of money flowing to new projects. Last year global capital expenditure on wind and solar assets grew from $357bn to $490bn, surpassing investment in new and existing oil and gas wells for the first time. Rystad Energy, a consultancy, reckons that investment will continue to rise over the next two years. The IEA expects China to build renewable-generation capacity capable of supplying 1,000 terawatt-hours by 2025, equivalent to the total power generation of Japan today. More money is also being earmarked for nascent technologies, such as green hydrogen, which could help decarbonise activities that are hard to electrify.

At the same time, the fuel squeeze has turbocharged clean-energy policy in the world's biggest economies. America's Inflation Reduction Act (IRA) earmarks $369bn of subsidies for green tech; the European Commission plans to provide at least €250bn ($270bn) to clean-tech companies, and has decided to bring forward the target for doubling the EU's installed solar capacity to 2025, from 2030. National ambitions have been supersized, too. In July Germany raised its target for the renewable share in power generation by 2030 to 80%, from 65%. China's 14th five-year plan for energy, released in June, for the first time sets a goal for the share of renewables in power generation (of 33% by 2025). The country's provincial governments are also increasingly offering green incentives.

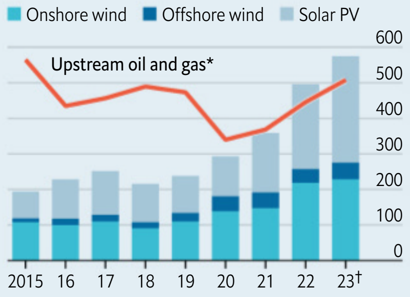
Much of the money will be spent inefficiently. The IRA comes with a raft of "Made In America" stipulations. In response, the European Commission may well loosen state-aid rules. This industrial policy will compound an existing problem: that of cost inflation. Russia's war lifted the price of metals such as aluminium, copper and steel, all of which are crucial for cables, turbines and panels. Although some commodity prices are now falling (see next story), costs are instead being pushed up by higher interest rates—a particular issue for developers of solar and wind farms, which require more capital upfront than regular power plants. High freight and power costs, as well as staffing shortages, add to the bill. Namit Sharma of McKinsey reckons that by 2030 the EU will have to quadruple the number of people developing, building and running green plants in order to meet its targets.

All this means that developers at the top of the green supply chain are not making much money. Several offshore-wind giants have recently announced that they will ▸▸

Winds of change

Global capital expenditure, $bn

By type of project



Source: Rystad Energy *Excludes exploration †Forecast carry out huge write-downs on projects. In theory, developers could pass higher costs on to consumers by bidding for potential projects at higher prices. But in practice miserly new national rules and auction designs make doing so difficult. This winter the EU adopted a windfall tax on renewable-energy generators, and a cap on wholesale power prices, in effect placing a ceiling on returns. Germany's new offshore-wind-tender system makes bidders compete over how much they are willing to pay to run projects, a system known as "negative bidding". Never-ending permitting wrangles dilute returns even further.

In an alternative, less protectionist universe America's and Europe's vast spending plans would have an even bigger impact. But even in this fallen world, they are still momentous—sufficient, forecasters consulted by *The Economist* estimate, to help accelerate the energy transition by five to ten years. The investment surge and tighter targets should create a huge amount of renewable-generation capacity. All told, the IEA expects global renewable-energy capacity to rise by 2,400GW between 2022 and 2027, an amount equivalent to China's entire installed power capacity today. That is almost 30% higher than the agency's forecast in 2021, released before the war. Renewables are set to account for 90% of the increase in global generation capacity over the period.

As green power is boosted and fossil-fuel use sags, the global economy is now expected to belch out much less carbon dioxide than had been predicted just 12 months ago. In part this is because emissions will not rise as high as they would have done had there not been a war. S&P Global, a data firm, thinks that those from energy combustion will peak in 2028—at a level the world would still have been producing in 2032 without Vladimir Putin's invasion of Ukraine.

Earth, wind and fire

Once the decline starts, it is also likely to be more pronounced. Artem Abramov of Rystad says emissions from fossil-fuel use, which he had predicted would be stable until the late 2020s, or even the 2030s, are now set to slide from 2025. This is because the rush for fossil fuels is unlikely to last long or be large enough to counteract the renewables boom. Although recent progress falls short of limiting global warming to 1.5°C by 2100, models suggest the changes make a 2°C rise more achievable.

For an illustration of the dynamics now at play, return to Germany. Lutzerath's fate was sealed by a political bargain. The deal means that two coal plants which were due to be shut in 2022 will instead run until March 2024. In return, however, two bigger plants will be retired in 2030—eight years sooner than had been planned. ■

Cobalt mining

Bolt from the blue

How an obstacle to the green transition disappeared

Just a year ago a global crunch in one metal looked likely to single-handedly derail the energy transition. Not only was cobalt, a crucial battery material, being dug up far too slowly to meet soaring demand, but the lion's share of known reserves sat in Congo, a country rife with instability, corruption and child labour. Fast forward to today and the price of the blue metal, which had more than doubled between summer 2021 and spring 2022, to $82,000 a tonne, has collapsed to $35,000, not far from historic lows.

The story is partly one of reduced demand. Most cobalt goes into the battery packs which power smartphones, tablets and laptops. Appetite for these, already strong in the 2010s, exploded during the covid-19 pandemic. It has since waned as people spend less time staring at their screens: as demand for consumer electronics fell, so did that for cobalt. Even a boom in electric vehicles has not been sufficient to counteract this, since manufacturers have done their best to reduce use of the formerly super-expensive metal.

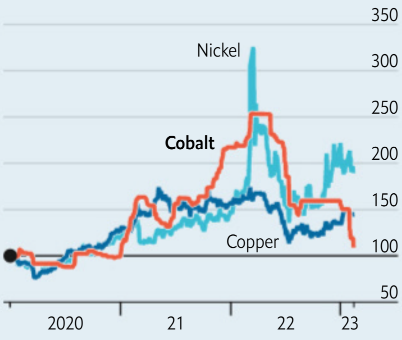
At the same time supply is rising, and fast. Susan Zou of Rystad Energy, a consultancy, forecasts that Congolese production will jump by 38% this year, to 180,000 tonnes. Most striking is a surge in Indonesian exports, which are projected to hit 18,000 tonnes this year, up from virtually none a few years ago. The world could find itself swimming in cobalt.

In other markets low prices would force producers to shut mines. Not for cobalt. The price has already fallen below many miners' break-even point. Yet Glencore, the world's biggest, said on February 15th that it may keep output nearly unchanged this year, having cranked it up in 2022; China Moly, a rival, is about to open a new facility that may yield 30,000 tonnes a year (equivalent to 16% of the world's output in 2022). Big firms can tolerate low prices because cobalt is a by-product of the extraction of copper and nickel, both of which remain pricey. Electric-vehicle makers the world over are courting Indonesia for nickel, kick-starting projects that will also yield cobalt. China Moly's monster mine in Congo will produce three times as much copper as it will the blue metal.

Prices may still rise a bit this year, as speculators seek to snap up bargains. Beyond 2025, however, another dampener looms. By this time, the first wave of electric-vehicle batteries, which typically last up to eight years, will begin to be recycled, reducing the need for new supply. No matter how fast the energy transition speeds up, the blue gold is unlikely to act as a brake.

Batteries recharged

Metal prices, January 2nd 2020=100



Source: Bloomberg

Cryptocurrencies

The afterFTX

WASHINGTON, DC

American scrutiny of major crypto institutions is intensifying

THE CRYPTO CROWD is hardly known for understating its own importance. Its members dubbed the implosion of FTX, the crypto exchange which collapsed spectacularly in November, the industry's "Lehman Brothers moment", a nod to the enormous ramifications of the fall of the investment bank. Now they say the industry is going through its "Dodd-Frank moment", a reference to the sprawling financial regulations that were put in place after Lehman's collapse.

In America, if crypto firms are regulated at all, they fall under the purview of various agencies—from the Securities and Exchange Commission (SEC), a markets regulator, and the CFTC, which oversees commodities, to numerous state bodies. All were ramping up enforcement actions against crypto businesses in 2022, after the go-go years of 2020 and 2021 pushed crypto products into the mainstream. But moves to curtail various crypto activities have now begun to reach a frenetic pace.

On February 9th the SEC reached a settlement with Kraken, a crypto exchange. The company agreed to pay a $30m fine and stop offering its staking-as-a-service business, in which customers deposited crypto tokens and the exchange "staked" them on their behalf, in return for rewards (in a manner not dissimilar to a bank offering interest). On February 13th the New York State Department of Financial Services (NYSFDS), a state financial regulator, ordered Paxos, a firm which issues stablecoins (tokens backed by dollars), to stop issuing a stablecoin it had created for Binance, the biggest crypto exchange.

These actions add to a growing list of enforcements against, or investigations into, crypto firms. In July the SEC launched a probe into Coinbase, a publicly listed exchange, investigating whether it listed crypto tokens that were, in fact, securities—a notion the exchange denied. And in August America's Treasury placed sanctions on Tornado Cash, software which runs on the Ethereum blockchain and mixes individuals' crypto deposits into a pool before dispersing them again, making it difficult to trace ownership.

To many in the crypto industry these actions are an affront, nothing less than an attempt to choke off a source of financial innovation. But the sum of the authorities' actions is revealing. First, their priorities have become much clearer. Second, the agencies have worked out methods which they can use to enforce laws or regulations in highly unfamiliar terrain.

One priority is snuffing out instruments that may be used for financial crime. Tornado Cash was allegedly employed by North Korean hackers to launder $450m of stolen crypto. NYSFDS's action against Paxos, a firm based in America, also appears to have been motivated by concerns about potential wrongdoing. Binance, which claims it has no headquarters, has been under investigation since 2018 for possibly failing to comply with American money-laundering and sanction rules. Paxos was not required to stop issuing its own stablecoin, the Pax Dollar—just the one it created for Binance. In response, Changpeng Zhao, the exchange's boss, tweeted that the stablecoin is "wholly owned and managed by Paxos". Paxos said it "categorically disagrees" with the basis for the SEC's investigation.

Thus the authorities have responded to potential wrongdoing by shutting down interactions with American firms. As Tornado Cash is a piece of software running on the Ethereum blockchain it is not possible to stop it functioning. So the Treasury has identified wallet addresses associated with the software, with which it has barred American institutions, like the exchanges, from operating. Similarly, it is more difficult to restrict the activities of Binance, which is not an American company, than it is to curtail the activities of Paxos, which is registered with authorities in New York.

Regulators' second priority is consumer protection. This is clear in the actions taken against Kraken. "Whether it's through staking-as-a-service, lending, or other means, crypto intermediaries, when offering investment contracts in exchange for investors' tokens, need to provide the proper disclosures and safeguards required by our securities laws," said Gary Gensler, chair of the SEC. He has begun to label previously unregulated offerings as securities, which are regulated by default.

Mark Lurie of Shipyard Software, which works on decentralised exchanges, argues that the boundaries authorities are drawing are "somewhat predictable". Regulators are applying existing rules and their targets are American institutions. This lack of imagination could hinder innovation, worries Tuongvy Le, formerly an SEC enforcement lawyer, now at the crypto arm of Bain Capital, an investment firm. "There really are novel structures in crypto," she says. Unlike Europe and Singapore, which have come up with new rules, America has so far relied on existing approaches. Still, the introduction of regulation is sometimes welcomed. On February 15th the SEC decided to tighten the standards for institutions holding crypto assets. The price of bitcoin surged on the news. ■

Capital controls

In full flight

HONG KONG

As Chinese tourists venture overseas, their money will follow them

A RAILWAY TOUR of Laos, a trip to the far corner of Russia to see the Northern Lights, or a polar cruise in the Arctic. These are some of the adventurous options being marketed in China as the country reopens. The urge to travel seems strong: Ctrip, a travel agent, has reported a quadrupling of inquiries in the space of a month; students are searching more for study-abroad opportunities, too. In Macau, a gambling centre, two of the fanciest hotels are fully booked this month. If pre-pandemic patterns reassert themselves, China's travel spending could increase by $160bn this year, according to Natixis, a bank.

After three years of covid-19 restrictions, this wanderlust is understandable. But alongside the obvious motives—sun, sea, sand and study—is another unstated one: spiriting money out of the country. Capital controls limit the foreign currency Chinese citizens can buy. The movement of people across borders creates cover for the movement of money. In 2017, for example, China's authorities reported how an individual from Tianjin got hold of 39 bank cards and withdrew more than C$2.4m ($1.8m) "in the name of studying abroad".

A paper published in 2017 by Anna Wong, then at America's Federal Reserve, tried to calculate how much money was leaking out of China by this route. She examined a variety of sources in 20 popular destinations, including their balance of ▸▸

Innocent sightseeing

payments, their tallies of visitor numbers and surveys of how much a typical Chinese visitor spends. This allowed her to compare outbound spending reported in China's balance of payments with its mirror image: inbound spending reported by countries of destination. In principle, the inbound and outbound measures should have matched. From 2014, though, a large gap emerged between the two. It reached $100bn in 2015, or 1% of China's GDP. Ms Wong found a similarly large gap between China's reported travel expenditure and the level predicted by an economic model, based on factors like the GDP of destination countries, their distances from the mainland and China's own economic size.

Since then, policymakers have tightened the country's capital controls and scrutinised transactions more closely. They have also revised past data, removing some illicit financial transactions from figures for travel spending. But a suspicious gap persists. China's own figures for travel spending still exceed those derived from destination countries and global sources. In a report released on February 14th Natixis estimated that the gap was almost $68bn in 2020 (roughly 0.5% of China's GDP), despite the sharp drop in travel.

As China reopens, chances for circumventing capital controls will increase. The country's currency is stable and growth this year looks likely to be strong, but Chinese households accumulated a large stash of deposits in the pandemic. The property market, historically a favoured destination for the country's wealth, remains moribund. Thus many will be keen to diversify their assets. Most people travel to broaden their horizons. The Chinese also like to broaden their portfolios. ■

Buttonwood Brace for impact

Investors expect a soft landing, which is not the good news it seems

With its trajectories, headwinds and tailwinds, the language of central banking abounds with aviation metaphors. Little surprise, then, that the policymaker's most heroic feat is named after Apollo 11's success in the space race. For wonks, a "soft landing" occurs when heat is taken out of the economy without causing it to veer into recession. Yet the phrase's illustrious origins hide an ignominious reality. The first time such a landing was predicted, in 1973, by George Shultz, America's treasury secretary, things did not go to plan. A recession began almost immediately; inflation blazed for the rest of the decade. Prices finally cooled under Paul Volcker, a Federal Reserve chairman, but only after interest-rate rises tipped America into successive recessions and the worst joblessness since the second world war.

Though Mr Shultz's forecast was catastrophically wrong, it was not unusual. As Michael Kantrowitz of Piper Sandler, an investment firm, has pointed out, investors often think a soft landing lies ahead as a Fed tightening cycle comes to an end. That is exactly what is happening this time around. Since October, the S&P 500 share-price index of large American firms has risen by 16%. An index of investment-grade corporate-bond prices compiled by Bloomberg, a data provider, has rallied by 9%. Worries about recession, overwhelming a few months ago, seem almost forgotten.

If history is any guide, such fears are likely to return. It is not that soft landings are impossible. Since the 1970s, Fed policymakers have managed them precisely twice. In 1984 and 1995, America's stockmarket began to rally just as interest rates reached their peak. Investors who bought early were rewarded with sustained, multi-year bull markets.

But there have been six other tightening cycles in the past 50 years, and all were followed by recession (even if the sixth, in 2019, was complicated by the covid-19 pandemic). One lesson is that soft landings are rare and hard ones more likely. The more troubling lesson is that, in the early days, the two scenarios are indistinguishable based on how stockmarkets behave. Before each of the hard landings, share prices began to rally, in some cases for up to a year. Then things started to go wrong. The economy sputtered, optimism fizzled and stocks plunged.

Mr Kantrowitz's explanation for the similarity between the very different scenarios is that, at least in the early days, hard landings look a lot like soft ones. Both feature interest-rate rises, followed by a pivot as the market prices in future cuts, and shares begin to rally. For the soft landings, this is the end of the story. But for the hard ones, the worst is still ahead: employment weakens, along with housing, and investors take a battering.

Therefore buoyant share prices today offer little information about whether the Fed's present tightening cycle will end happily—a matter on which opinion remains sharply divided. More cheerful types, chief among them Joe Biden, America's president, point to an impressively resilient economy and a labour market that is booming despite the swiftest series of interest-rate rises since Volcker's era. Others fear, however, that the impact of rate increases is still to come. Edward Cole of Man Group, an asset manager, worries that tightness in the labour market and an excess of household savings—both leftovers from the pandemic—are delaying the pain of monetary tightening that will eventually be felt. The average response of 71 professional economists surveyed in January by the *Wall Street Journal*, a newspaper, puts the probability of recession in the next 12 months at 61%.

If the stockmarket is an inadequate guide, other indicators have more predictive power. Unfortunately, they present a less rosy picture. In previous Fed tightening cycles, soft landings were typically preceded by relatively low inflation, and accompanied by looser bank-lending standards. Today's circumstances are the exact opposite.

The surest recession indicator of all is the gap between ten-year and three-month Treasury yields. Typically this is positive, with long-term yields higher than short-term ones (as investors demand a higher return to lock up their money for longer). The gap has turned negative (meaning investors expect imminent and sustained rate cuts) only nine times in the past half-century. Eight were followed by recessions. The ninth negative spell started last October and continues today. As Fed officials bring the economy in to land, the most reliable part of the dashboard is flashing red.

Economic policymaking (1)

Not a scientist

WASHINGTON, DC

David Malpass leaves the World Bank. His record was better critics will credit

David Malpass's presidency of the World Bank started and ended in controversy. When Donald Trump picked the former investment-bank economist and Treasury official in 2019, Mr Malpass was seen as someone who did not believe in multilateralism and might sabotage the bank. On February 15th, when he announced his intention to resign in June, he was dogged by comments in which he appeared to question climate change—a major focus for the lender. Between these dark clouds, though, Mr Malpass was a surprisingly effective leader. He helped stabilise a drifting institution and presided over a big expansion in its lending operations.

Mr Malpass's exit will come nearly a year before his term is due to expire, hinting at differences between him and the bank's leading shareholders, including, notably, his own country. Earlier this month Janet Yellen, America's treasury secretary, said the bank needed to move more quickly to reform its operations: for example, changing the way it analyses global challenges such as climate change and stretching its balance-sheet in order to disburse more money. Ms Yellen's comments had the makings of an ambitious new agenda for the bank—all the more reason for a new president, armed with a five-year term and strong backing from member countries, rather than a lame duck in his final year. Mr Malpass described his early departure as "an opportunity for a smooth leadership transition".

Critics celebrated his exit. "This must be the first step toward true reform that places the climate crisis at the centre of the bank's work," said Al Gore, America's former vice-president. Mr Malpass met with scorn last year when he dodged questions about whether the burning of fossil fuels causes global warming, saying he was "not a scientist". His response had revived earlier concerns that Mr Trump's appointee could not be trusted.

But his record was better than pessimists feared would be the case. His predecessor, Jim Yong Kim, had been bent on reinventing the bank, bringing in consultants, slashing costs and centralising its structure. Mr Malpass inherited an institution that was demoralised and in disarray. The calls for new reforms, which would involve taking on more responsibilities, reflect the fact that he has helped steer the bank back towards its pre-Kim identity.

In 2022 the World Bank's commitments—a broad measure of the financing it provides—reached $115bn, nearly double the amount in 2019 when Mr Malpass took over. This expansion reflects the bank's role in helping poor countries overcome the covid-induced recession and the energy-plus-food crisis following Russia's invasion of Ukraine. Strikingly, the bank also doubled its climate finance, reaching nearly $32bn last year. Despite this tangible progress, Mr Malpass struggled to escape the impression that his heart was not really in it. "I see it more as a missed opportunity rather than a period during which there was major turmoil or the institution failed to deliver," says Masood Ahmed, president of the Centre for Global Development, a think-tank in Washington.

America picks the World Bank's president as part of an understanding with European governments, which choose the head of the IMF. Possible candidates are believed to include Samantha Power, who runs the American agency for international development (USAID), and Raj Shah, a former head of USAID. Whoever succeeds Mr Malpass will do well to heed the lesson that carelessly chosen words can undermine good work. ■

Economic policymaking (2)

Brain gain

WASHINGTON, DC

A new leader will take control of America's economic nerve centre

A dimly lit room, with a small meeting table and a desk, may not look like a focal point for America's economy. But the director of the National Economic Council's (NEC's) office, in the White House west wing, is a crucial place. Its occupant for the past two years, Brian Deese, has crafted the administration's response to the covid-19 slowdown, inflation and China. In the coming days Lael Brainard, a board member at the Federal Reserve since 2014, will take over the poky but powerful office.

Amid Washington's formidable political machinery, at first glance the institution of the NEC also seems puny. It is young—founded a mere three decades ago—and has only 30 staff. But it is the clearing-house for White House economic debates, helping the president set strategy. It then co-ordinates departments in the implementation of policy. With power concentrated in Joe Biden's White House, the NEC has gained clout compared with cabinet agencies, notably the Treasury.

Meet the new boss

Mr Deese steps down at a natural time for a reshuffle, following midterm elections. He had a productive run. Congress passed four big pieces of economic legislation, adding up to trillions of dollars of spending: a covid-recovery package, plus hefty investment in infrastructure, semiconductors and clean technologies.

Legislative success stems from officials working together. But Mr Deese was consistently at the centre of things. "He had a commanding understanding of every issue," reports Jason Furman, deputy director of the council under Barack Obama. Mr Deese worked with Republicans to secure the passage of the infrastructure bill and with Joe Manchin, an obstreperous Democratic senator, to enact the climate law.

Yet this legislative success did not always produce real-world success. The pandemic package contributed to inflationary pressure, which America is still struggling to rein in; the administration's industrial policy has annoyed allies, who see it as protectionism. The task falls to Ms Brainard, an experienced policymaker, to see through the wide-ranging plans and to remedy missteps. "She has the skills to roll up her sleeves and get that done," says Wendy Edelberg of the Brookings Institution, a think-tank. There is scant prospect of anything more ambitious in the next two years, since Congress is divided.

Her experience may help President Biden mollify allies concerned by his subsidies. As America's top financial diplomat under President Obama, Ms Brainard worked well with other countries, a quality that will again be in demand. At the same time, she will also have a role in ensuring that America dodges calamity and raises the debt ceiling. With a background as both a central banker and a Treasury official, Ms Brainard is well placed to navigate the budgetary shoals. She will still need all the heft the NEC can offer to get her way. ■

Free exchange | The case for optimism

Globalisation seems in bad shape. But deep-rooted forces suggest reasons for hope

"WE ARE SUFFERING just now from a bad attack of economic pessimism," wrote John Maynard Keynes in 1930, in the midst of a disintegrating global economy. He went on to describe the much better future the world could expect if it ever got its act together. Things are not so bleak today, but it is nevertheless hard to feel cheerful about globalisation's prospects. America and China, which together account for nearly a quarter of world trade, are on ever-icier terms. Rules which fostered an era of rapid globalisation are being flouted into irrelevance. Perhaps most distressing is the sense that this film has played before. The 19th century saw its own period of breakneck globalisation. In the end, however, economic nationalism and great-power conflict destroyed the global trading system, and much else besides. A spiral towards catastrophe sometimes seems only a few stray balloons away.

The world has experience with cold war, but not between countries as economically intertwined as America and China. In a suspicious atmosphere, accidents happen. The habit of protecting and subsidising domestic firms—as both countries are now doing on a gargantuan scale—may prove difficult to break. All this means globalisation's immediate prospects appear bleak. But looking on the bright side, as Keynes did, is a helpful reminder of the ways in which events often end up going better than expected. Where globalisation is concerned, demography, technological progress and the example of history itself could push the world in the direction of more, rather than less, integration. Globalisation's prospects are brighter than most now appreciate.

Start with demographic change. History suggests that trade policy responds to the relative scarcity or abundance of factors of production, like labour. In the 19th century, countries with lots of land but few workers, like America and Australia, subsidised immigration. But as economic integration narrowed price and wage gaps across countries, and workers in once labour-scarce economies grew angry at slow pay growth, governments began erecting barriers to goods and people. Recent experience tells a similar story. Exposure to imports from labour-rich economies like China fuelled anti-trade sentiment. Americans have elected successive protectionist presidents after years of labour-market weakness, in which too many workers competed for too little work.

Recently, though, the situation has begun to change. Unemployment rates are low across much of the rich world, and investment programmes intended to reshore production may further boost demand for workers, even as labour forces grow more slowly or shrink. Although robots may eventually help plug workforce gaps, rich countries looking to expand production will need to welcome foreign workers, or source goods and components through supply chains which tap abundant labour supplies in other economies. Either would deepen cross-border ties.

Technological change is another cause for optimism. In the 19th century, railways and telegraphs brought a sharp decline in transport and communication costs, and were at least as responsible for economic integration as cuts to tariff barriers. Over the past half-century, information technology and container shipping helped make the explosive growth of global supply chains possible. Today, privacy and national-security concerns have led to some balkanisation of digital-information flows. One might suppose governments will be more protective still of powerful new AI.

But technology will facilitate trade in other ways. The transition to renewable energy sources will create new patterns of resource scarcity and abundance. Remote-work technologies have already reduced the cost of providing services across borders. In a context of labour scarcity, this sort of trade is likely to increase, whether or not domestic working arrangements return to patterns last seen before covid-19. In addition, continued improvements in machine translation and speech recognition will reduce the cost of trade in both goods and services among countries that speak different languages. Although the macroeconomic effects of progress in AI are difficult to predict, an AI-powered economic boom would probably be associated with large global flows of investment and capital goods. If productivity were to surge in the economies of AI leaders like America, such places might become more eager to export and more open to measures which liberalise trade.

Optimism is warranted, above all, because we learn from the past. The macroeconomic shocks in 2007-09 and 2020 could easily have sparked depressions, but did not because policymakers understood how to avoid the gravest errors of the 1930s. Covid took an awful toll, but advances in public health and medicine helped ensure that the pandemic was less deadly than the Spanish flu, in a world far more populous and connected than that of 1918. And whereas the leaders of a century ago could not anticipate the terrible cost of the detour taken in August 1914, those today are well aware of it. History will be different as a result.

All change

Those still feeling dour should take courage from recent experience. For all the considerable difficulties of the past decade or so, global trade as a share of GDP has only retreated a little from the peak it reached in 2008. Recent history demonstrates, moreover, that nothing in geopolitics is for ever—and trends which look inexorable come to an end. The cold war divided the world and then, suddenly, it did not. Supreme confidence in the inevitable spread of democracy was displaced by the worry that an authoritarian China would dominate the globe, which is now barely a worry at all. The stalemate between America and China will one day be old news, perhaps sooner than most currently think.

Mistakes led the world to its current uncertain state, it is true. And more mistakes will certainly be made. But the past shows only what has gone wrong, not what will. It is by remembering this that we find the wisdom to do better. ■

Science & technology

Manufacturing and climate change

Crystal maze

A new way to clean up the steel industry could cut emissions by more than 90%

MAKING STEEL is a dirty business. For every tonne of it some 1.8 tonnes of carbon dioxide (CO_2) are emitted into the atmosphere. As a result, steelmaking accounts for 7-9% of the world's anthropogenic greenhouse-gas emissions.

Cleaner ways of producing steel are being explored. Mostly, these are based on the use of hydrogen instead of coke as the reagent which extracts the oxygen from iron-oxide ore. But much of the pertinent technology is in its infancy. That, together with the cost of converting from old to new equipment, which might run to several billion dollars per plant, means it could take decades for steelmakers to go green.

Yulong Ding and Harriet Kildahl of the University of Birmingham, in Britain, have, however, come up with something they think might change things. They have developed a process which could be fitted quickly and cheaply to existing plants, and would cut their emissions by around 90%. Steelmakers are talking to them about getting a demonstration version up and running within five years.

Drs Ding and Kildahl propose employing a closed-loop carbon-recycling system to replace most of the coke. At the moment, coke and ore are packed in alternate layers inside a tower-like blast furnace and, as the name implies, blasted with air that has been heated to more than 1,200°C. At this temperature the carbon in the coke reacts with the oxygen in the air to yield carbon monoxide (CO). This gas then goes on to react with the oxygen in the ore, liberating the iron in a process called reduction. Heat from the various reactions involved pushes the furnace's temperature above iron's melting point (1,538°C), and the resulting liquid metal flows out of the bottom of the tower. Meanwhile, CO_2 and other gases, including residual nitrogen from the injected air (which starts as 21% oxygen and 78% nitrogen), are vented from the top.

→ Also in this section

72 A contraceptive for men?
73 Heat-stabilising mRNA vaccines
74 Black holes and dark energy
74 L-DOPA and plant protection

The modification Drs Ding and Kildahl propose (see diagram on next page) cuts coke out of the loop by pumping CO directly into the blast furnace. The clever bit is where this gas comes from. It is made by capturing the CO_2 produced in the furnace and recycling it by splitting it into CO and oxygen. The oxygen thus released can then be used in the second part of the steelmaking process, in which that gas is blown through molten iron in a differently designed furnace, to burn off part of the carbon now dissolved in it and arrive at the optimum ratio of iron to carbon to create the type of steel required.

What makes all this possible is an intriguing material called a perovskite. This sits in a reaction chamber at the heart of the recycling system. The original perovskite was a mineral discovered in the Ural mountains, in Russia, in 1839, and named after Count Lev Perovski, a mineralogist from that country. The name has now been generalised to refer to a group of materials which share this mineral's distinctive crystal structure without necessarily sharing its chemical composition.

▸▸

Researchers are finding a variety of roles for perovskites. One type is used to make solar panels more efficient. Another can produce phone screens that are almost unbreakable. Further variants are employed in fuel cells and other clean-energy systems. Drs Ding and Kildahl made their version by grinding up barium carbonate, calcium carbonate, niobium oxide and iron oxide, mixing the resulting powders, and then baking the mixture in an oven. The result is $Ba_2Ca_{0.66}Nb_{0.34}FeO_6$ (BCNF1, to its friends).

When the recycling system pumps the CO_2 through the reaction chamber, the BCNF1 grabs oxygen atoms from the gas and absorbs them into its crystalline structure, leaving behind CO. This cannot go on for ever, though. After about a day, the BCNF1 becomes saturated with oxygen atoms, and so has to be rejuvenated.

That works by taking nitrogen emitted from the blast furnace and pumping it through the reaction chamber. This creates a low-oxygen environment inside the chamber, encouraging the BCNF1 to release its oxygen. When the oxygen is used to make steel, that also emits carbon dioxide. But this, too, can be recycled through the reaction chamber.

Around in circles

The trick to making things efficient is to plumb two reaction chambers into the system. One can then be used to make CO while the other is rejuvenating and producing oxygen. After a day, their roles are reversed, allowing round-the-clock operation. The idea has been tested successfully in a laboratory without any degradation of the BCNF1, says Dr Kildahl. "That part of the system works," she adds. "It just needs to be scaled."

For the trial plant to get under way, some hurdles will have to be overcome. One is that besides being a source of CO for the iron-reduction process, the coke also provides a structural support for the ore in a blast furnace, allowing the gas to rise up through it and the molten iron to flow down, so some is still required. One idea the team have is to replicate this support using ceramic materials.

The science thus looks promising. But what about the numbers? To evaluate those, the researchers looked at Britain's steel industry, which makes some 7.6m tonnes of the stuff a year. Two firms, Tata Steel and British Steel, each turn out 3m tonnes at their plants in Port Talbot and Scunthorpe respectively, using the conventional approach of blast furnace followed by oxygen furnace. This accounts for 94% of the sector's British emissions. The remainder comes from electric-arc furnaces, which use mainly scrap steel and can be run on renewable electricity.

The Port Talbot and Scunthorpe plants could be adapted to use BCNF1 at a cost of around £360m ($435m) each, the team calculate in a recent paper in the *Journal of Cleaner Production*. Of this, £210m would pay for the 42,500 tonnes of perovskite needed by each plant. That material might have to be replaced every five to ten years. However, the researchers estimate that, besides the green benefits accruing, the initial investment would be repaid in 22 months by the elimination of expensive metallurgical coke from the process, and from selling any oxygen that was surplus to requirements.

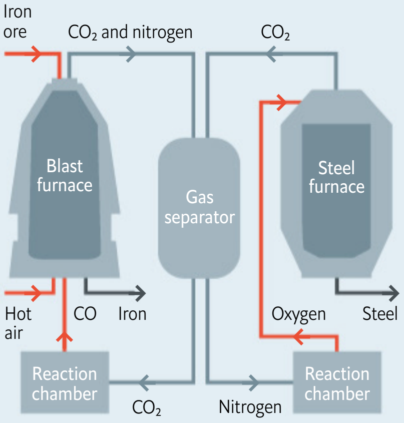
Even allowing for a small increase in electricity consumption, implementing the system on both sites would save about £1.3bn over the course of about five years. There would also, the researchers conclude, be a reduction in carbon-dioxide emissions of 88%, resulting in a countrywide fall in overall emissions of 2.9%

The point of replacing coke with hydrogen would have been to reduce the ore in a way that created water rather than CO_2, thus eliminating climate-warming emissions. Hydrogen can, moreover, be produced sustainably, using renewable electricity to electrolyse water. But the infrastructure required to make, store and transport green hydrogen does not yet exist. And there are competing demands for the gas, including as a replacement for natural gas as a fuel for boilers, and in the production of green aviation fuel. So Dr Ding's and Dr Kildahl's proposal does look like a serious alternative.

Given more work, it might be possible for BCNF1 to replace all of the coke in a blast furnace, cutting emissions down close to zero, reckons Dr Ding. If the talks with steelmakers are successful and a trial plant is built, the next step is to see whether the system proves its worth. If it does, then a curious crystal will start to give green hydrogen a serious run for its money. ■

The steel merry-go-round

Closed-loop recycling



Sources: University of Birmingham; *The Economist*

Contraception

A step towards a Pill for men?

A fast-acting, temporary contraceptive shows promise in male mice

How often does locker-room talk involve nuanced discussion of the various types of contraceptives available, and the merits and difficulties associated with them all? In women's locker rooms, the answer is "surprisingly frequently". In men's, "hardly ever". Contraception has long been an overwhelmingly female issue.

At least in part, that is because men have little to discuss. Their choice is between condoms and vasectomy. Women, by contrast, may pick from a range which includes the Pill, vaginal rings, copper intrauterine devices, hormonal intrauterine devices, contraceptive sponges, cervical caps, spermicides, diaphragms, female condoms and tubal ligation. For decades, therefore, researchers have hunted for ways to level the playing field by extending men's options. But none of the resulting injections, gels and hormonal pills has so far advanced beyond clinical trials.

Jochen Buck and Lonny Levin, who work at Weill Cornell Medicine, in New York, have now entered a new runner into the race. Their candidate, rather than requiring the consistent and long-term application associated with pills and gels, is fast-acting and temporary. In a paper published in *Nature Communications* they show that, in mice at least, it works within half an hour, rendering the animals temporarily infertile by stopping their sperm swimming, but with no perceptible changes in their behaviour or sexual performance. Importantly, within a day, their fertility returns.

The substance concerned, TDI-11861, belongs to a class of molecules called soluble adenylyl cyclase (SAC) inhibitors. SAC itself is found in nearly every body cell. It is a source of a messenger molecule called CAMP, and its activity is regulated by bicarbonate ions. A preponderance of those ions speeds up the rate at which SAC produces CAMP. A dearth slows it down.

The concentration of bicarbonate varies little from tissue to tissue with one notable exception. In the epididymis, the tube in which mature sperm are stored, it is a fifth of the usual level. The significance of this is that, at ejaculation, a tiny pellet of sperm is pushed forward and mixed with seminal fluid, suddenly quintupling the bicarbonate concentration. That causes SAC to produce a bunch of CAMP.

This increase in CAMP then activates the sperm, and lets them start swimming and searching for an egg to fertilise. TDI-11861 blocks the places on SAC where bicarbonate would normally bind, rendering it unresponsive to this rapid change in concentration. That stops them swimming.

Although TDI-11861 inhibits SAC everywhere in the body, Dr Buck and Dr Levin say this is not a cause for concern. Some men lack functioning SAC because of a mutation. That results in infertility and a slightly raised incidence of kidney stones, but otherwise they are completely normal. So, while SAC appears to be a unique link in the chain of sperm mobilisation, the body has built plenty of redundancy into its means of generating CAMP.

Whether Dr Buck's and Dr Levin's discovery will actually prove to be the long-sought breakthrough in the search for a Pill for men remains to be seen. More animal tests will be needed before trials on people can go ahead. The two researchers are, however, already looking at other SAC-inhibiting compounds, to determine which performs best.

One approach they use is x-ray crystallography, which shows how molecules fit together at an atomic level. With it, they have improved how well their compound binds to the right spot on SAC, and stays there—and they hope to do better still.

Right now, men have less control over family planning than women do, and sometimes feel little responsibility for it. That is surely not unconnected with the fact that, according to the United Nations Population Fund, nearly half of pregnancies—121m each year—are unplanned. "This", Dr Levin says, referring to SAC inhibition, "gives men the ability to be a partner." Who knows? Some of them might even give it a try. ■

Stabilising mRNA vaccines

Warming to their task

Vaccines based on MRNA need to get out of the freezer

The first successful attempt to transport vaccines over long distances was crude, but ingenious. In 1803, seven years after Edward Jenner's demonstration that inoculations of the lymph from cowpox pustules could protect against smallpox, a group of 22 orphan boys embarked in La Coruña on a ship bound for Spain's American colonies. Two had been deliberately infected with cowpox. When they developed pustules Francisco Xavier de Balmis y Berenguer, the doctor who had organised the expedition, used the lymph therein to inoculate two more. And so on, until the ship arrived a little over two months later and inoculations could be given to locals.

It was a splendid success. Thousands of people across the empire, as far north as Mexico, as far south as Peru and (after a further expedition crossed the Pacific) as far west as the Philippines, were vaccinated. Even today, though using orphans for them is now discouraged, the concept of vaccine-preservation chains lives on, with "cold chains" of refrigerators or freezers being employed routinely to preserve heat-sensitive material that is being moved from place to place.

But cold chains are not ideal, especially in countries with dodgy electricity supplies and a lack of technicians to keep them in tip-top condition. Ways of heat-stabilising vaccines are therefore constantly being sought. And two may soon become available for some of the most heat-sensitive of the lot, the MRNA vaccines recently developed against SARS-COV-2, the agent of covid-19.

The Pfizer version of this vaccine is particularly fussy. It must be stored at around -70°C. But even Moderna's offering requires around -20°C. And the problem will soon increase, for the MRNA approach to vaccine-making is being extended to other diseases, including cancers as well as infections. In January 2022 a transnational group called the Coalition for Epidemic Preparedness Innovations (CEPI) therefore put out a call for novel ways to preserve and deliver MRNA vaccines. To date, it has received more than 70 proposals, of which two in particular, from firms called 20Med and Vaxxas, look promising.

Goodbye to all that

Messenger RNA vaccines, to give their full name, have a pair of components, both of which are heat-sensitive. The first, the MRNA itself, is a form of genetic material that encodes a piece of viral protein. When churned out by sub-cellular factories called ribosomes, which translate the RNA's message, this protein fragment trains the immune system to recognise and combat the virus. The other component is an oily layer of lipid nanoparticles (LNPS) into which the RNA is packaged for protection until it arrives at its target, but which still permits it to be exposed to the cells in a way that allows it to provoke an immune response.

The approach developed by 20Med improves the protective shield, without compromising the contents' ability to provoke immunity, by replacing the LNPS with proprietary polymers of as-yet-undisclosed composition. These preserve the RNA from degradation until it arrives at its target. This version will still require cooling, but not below freezing point. Somewhere between 2°C and 8°C is fine, so all you need is a standard refrigerator.

Vaxxas's approach is more radical. Its researchers are developing a dry vaccine delivered by skin patches armed with thousands of tiny needles. When a patch is applied, the needles penetrate the surface and deliver the vaccine to the immune-cell-rich layers below.

A patch of good luck

The point of doing this is that removing the water from a vaccine stabilises it. The main factor driving MRNA degradation in storage is hydrolysis—the breaking by water of the chemical bonds that hold a molecule together. Even one change in a strand of MRNA can stop it from working properly. Less water means less hydrolysis, and that means less damage.

The stability of the resulting product means patches could be distributed by post, instead of using a special courier or delivery company. They could also be stockpiled for use in future outbreaks. And there is one further benefit. Using patches in this way removes the need to train people to administer doses by injection, for applying a patch is easy.

Both new approaches are still in the early stages of development. But Richard Hatchett, CEPI's boss, reckons MRNA-based vaccines will be "an important part of our armamentarium to prepare for future emerging diseases". The ability to develop, manufacture and then deliver effective vaccines will be vital. Xavier de Balmis would have been proud. ■

Cosmology

Black holes and dark energy

Two of the universe's most enigmatic phenomena may be intimately linked

Black holes—objects so dense that nothing can escape their pull—are among the most eye-catching predictions of general relativity, a model of gravitational attraction proposed by Albert Einstein over a century ago. They squat invisibly in the middle of galaxies, feasting on stars and interstellar debris.

They are also a clear indicator that general relativity's days as gravity's best explanation are numbered. That theory says a black hole's core is a point of infinite density and pressure called a singularity. This, says Chris Pearson at RAL Space, Britain's national laboratory for space research, is a mathematical impossibility.

A host of more palatable alternatives have been proposed, but none has the observational evidence needed to back it up. Two new papers, in the *Astrophysical Journal* and *Astrophysical Journal Letters*, co-written by Dr Pearson, are intended to change that.

The papers' authors scoured astronomical data for information about black holes at two stages of their lives. The first sort were youngsters at the centres of new galaxies in which stars were forming at a prolific rate. The second were more elderly examples in galaxies where star formation has ceased. According to their assumptions, the second group show what fate has in store for the first. To their surprise, the researchers found that the old black holes had grown ten times faster than cosmological models would predict. But they think they know what might be happening.

Previous work has shown that, in general relativity, the compression of matter past a certain point can lead to the formation of a zone containing vacuum energy, the background energy of empty space. Instead of an infinitely dense singularity, it is therefore possible that black holes contain a well of such energy, the presence of which would account for the observed mass discrepancy. "This", says Dr Pearson, "is the first time there's been observational evidence that links these theories to the real world."

More radical implications follow. One of the universe's most mysterious features is that the expansion which began with the Big Bang is accelerating. The driving force is labelled "dark energy", but no one knows what it actually is. In a daring theoretical leap, Dr Pearson and his colleagues suggest that the pockets of vacuum energy present in black holes could be responsible.

What would make this possible is that the properties of vacuum energy are dependent on the size of the universe as a whole. An expanding universe, say theorists, would contain vacuum energy at ever greater densities. This not only means that black holes would gain mass in hitherto unexplained ways, but that their growth would fill the universe with vast reservoirs of energy. They could, in other words, be sources of dark energy.

The team's calculations show that the size and number of black holes in the universe would be enough to account for all the measured influence of dark energy. The neatness of this explanation is remarkable, but elegance is no proof of truth. Much more work is needed to discount other, albeit less spectacular, possibilities. ■

Biological control

News from the underground

Plants call for help using a substance employed by people as a drug

Botanists have known for years that some plants send distress calls when under attack from herbivorous insects such as aphids, and that these calls lead neighbours to release volatile chemicals which draw other insects into the area, to attack the attackers. This response brings mutual benefits. It helps the plant already under attack. And it also stops the infestation spreading.

That at least some of these calls for help travel underground is also clear, but the details were murky. Now, a study published in *Ecology Letters* by Emilio Guerrieri of the Institute for Sustainable Plant Protection, in Turin, has shown that these subterranean cries for help are made using a molecule, L-DOPA, which achieved fame in the 1990s as the star of a film called "Awakenings".

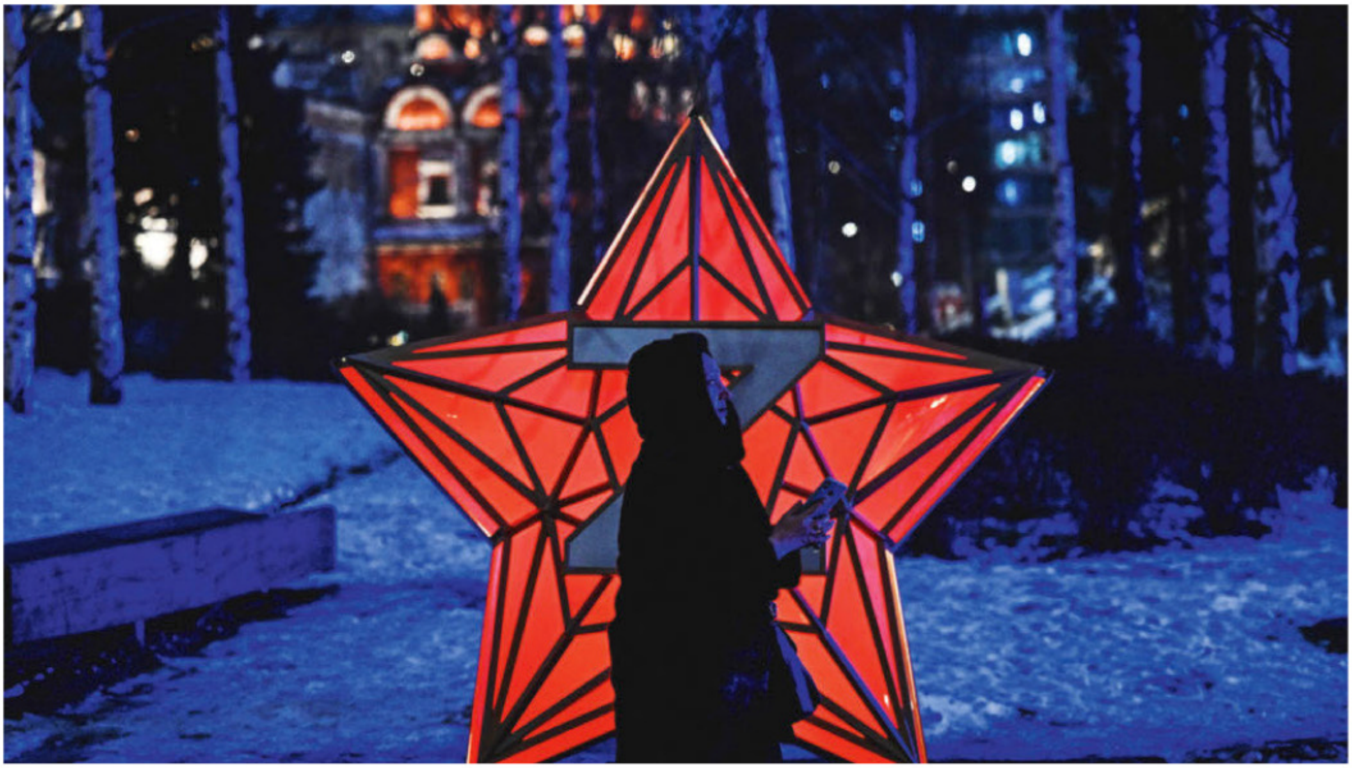
"Awakenings" is based on cases described in his own, non-fiction, book of that name by Oliver Sacks, a psychiatrist who lived in New York. Sacks used L-DOPA, a precursor of several so-called neurotransmitters, including dopamine and epinephrine, which carry signals between neurons in animals, to treat victims of encephalitis lethargica, a mysterious illness that spread around the world in the second and third decades of the 20th century. Encephalitis lethargica caused catatonia. L-DOPA permitted victims to awaken, though only for a while.

An aphid's nightmare

Dr Guerrieri worked with broad-bean plants, pea aphids and wasps called *Aphidius ervi*, which lay their eggs in aphids (see picture). Past studies had shown that broad beans can recruit neighbours as allies even when covered with plastic bags—hence the belief that the signals involved were subterranean. But no one knew the chemical doing the recruiting. By growing the beans hydroponically, rather than in soil, he and his colleagues were able to find out.

They raised 80 bean plants, infested 40 of them with aphids two weeks after germination, and then, three days later, tested samples of the hydroponic solution of each using a process called bioassay-guided fractionation. The principal difference they found turned out to be levels of L-DOPA. And when, having discovered that, they raised further batches of beans and fed synthetic L-DOPA to half of each batch, they discovered, first, that those receiving the molecule, but not the others, were indeed attractive to *A. ervi*, and, second, that these plants produced more than the others of three particular chemicals which previous work has suggested are the wasp-attracting substances.

That L-DOPA plays a role (albeit a different one) in communication in species as diverse as human beings and bean plants is intriguing. But it is also useful information. What works for broad beans probably works for a range of other crops. And L-DOPA is easy and cheap to manufacture. So it might make sense to add it to irrigation systems, thereby discouraging aphids by recruiting wasps to the cause.



Russian art in wartime

Culture in the time of Z

MOSCOW AND ST PETERSBURG

Repression can stifle a culture. Creating a new one is another matter

IN A SMALL underground theatre in the shadows of a railway line in Moscow, a crowd has fallen into what can only be described as nervous hysterics. Individual acts of defiance are unusual in the age of Z (the symbol of Russia's war in Ukraine and the nationalist mindset that goes with it). A collective endeavour such as this appears to trigger extreme emotions. The play being performed is a comic take on a biblical classic, but the contemporary allusions are not hard to fathom.

In a Sovietised version of Bethlehem, a paranoid, elderly autocrat is preparing for the slaughter of all young boys aged two and under. The newly born hero of the story—not Jesus in this case, but "Little Sergei"—is saved when a guardian angel warns his parents to leave for Egypt before it is too late. Audience members who have been following social media know that the real-life inspiration for Little Sergei, Serhii Podlianov from Zaporizhia, was far less fortunate. He was killed in November by a Russian missile, aged just two days old.

Zhenya Berkovich, the play's writer and director, is a rare breed in today's Russia: a young creative type declining to take the heavy hints to shut up. Even as Vladimir Putin's "special operation" struggles to make progress in Ukraine, the fear and conformity it has instilled at home mean that domestically, at least, it is yielding real results. Since February 24th last year, when the current invasion began, authorities have used the crisis to try to yank Russian life from a Western trajectory, meddling in personal space, culture and even schools in a way not seen since the Soviet Union.

In the arts, the result has been a toxic mix of repression and preventive self-censorship. Together with a mass exodus of creative talent, this is arguably the biggest disruption to the course of Russian culture since Stalin's "cultural revolution" saw off the avant-garde in the benighted 1930s. In a telling indication of autocracy's limits, however, a push to foment an alternative pro-war culture has been markedly less successful.

Ms Berkovich says she is under little illusion about the reach and effects of her own work, which she describes as a "modest personal survival mechanism". Theatre touched only a tiny part of the population at the best of times, she says. In the context of Z-Russia, writing a play that "emphasises the miracle of life" was equivalent to no more than a "mosquito dance". She sympathises with those who think politically engaged citizens should have different priorities now. But it is not a case of choosing between culture and conscience: "You should always choose both."

Not all cultural figures share Ms Berkovich's fierce anti-war stance. Pragmatic silence is common. A fringe of loyalists such as Valery Gergiev, a conductor, and Vladimir Mashkov, a theatre director, openly embrace the war. At the most grotesque end of the spectrum is a new wave of Z-culture, which the Kremlin has actively promoted. So far the most prominent artist to have broken into the mainstream is the musician Shaman, who has taken to performing hits such as "I'm Russian"—"I'm Russian/I go to the end/I'm Russian/My blood comes from my fa-aa-ther"—for the already war-shocked citizens of Donbas in occupied eastern Ukraine. ▸▸

→ Also in this section

76 Home Entertainment: A choral star
77 Psychological fiction
77 Capitalist propaganda
78 Femicide in Mexico
79 Johnson: Stigma and euphemism

Some unlikely figures have also begun dabbling in the arts scene. The warlord Yevgeny Prigozhin—whose Wagner brand is better known for executions by sledge-hammer—has opened a “cultural” and “co-working” space in St Petersburg. On January 21st the dystopian Wagner Centre hosted the opening of a new “anti-colonialist” exhibition by Alexei Chizov, a local artist.

The aim of the show was to emphasise “Russia’s aesthetic and ethical sovereignty”. But the confusing paintings, which depicted buff soldiers in poppy fields, left most of the visitors perplexed. Were they Wagner soldiers? (Apparently not: they were meant to be American.) One woman wondered aloud if the images were homoerotic, only to be drowned out with shouts of “Provocation!”

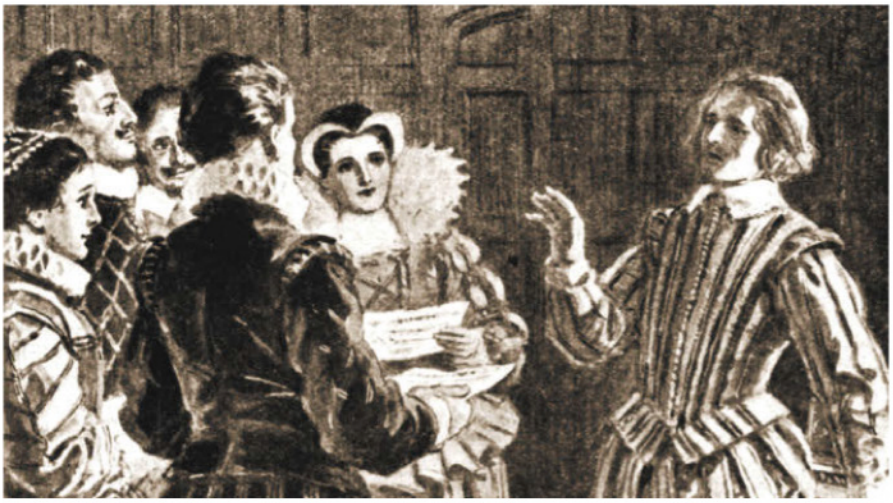
The comically middling talents of the pro-war culture legion have somewhat limited its impact. “The grey and talentless are trying to take the place of what the state is forbidding, but nobody wants to see it,” says Anatoly Golubovsky, a critic. The trouble, from the authorities’ point of view, is that “non-conformism happens to be better and more profitable.” And with state funding scarce amid the war, cultural institutions are prioritising the bottom line.

The directors Dmitri Krymov, Aleksandr Molochnikov and Kirill Serebrennikov are all opposed to the war. But their plays, which are not themselves explicitly anti-war, are commercially successful and continue to be staged—albeit, absurdly, with the directors’ names removed. Bookshops still sell “Summer in a Pioneer’s Necktie”, an LGBT-themed literary blockbuster, notwithstanding a criminal case over its alleged homosexual propaganda. Meanwhile cinemas across Moscow continue secretly to show Western films such as “Avatar”, despite international sanctions and the absence of a local licence.

Flowers in the cracks

The life that continues in the gaps suggests government control is still some way short of Soviet totalitarianism. “Russian reality is in fact a mix of off-the-scale cruelty and kindergarten idiocy, and sometimes one saves you from the other,” says Ms Berkovich. All the same, the risks of stepping outside what counts as permissible in culture are real, and growing.

Ms Berkovich has already been threatened with prosecution. Her appearances at festivals have been cancelled at the last minute. An army of trolls has been attacking her on social media. For now, however, the director has decided against joining her creative peers in exile abroad. She sees a purpose in staying in Russia until that becomes impossible: “Putinism isn’t a geography, it’s a time. You can try to close your window to stay warm, but it will still be cold on the street outside.” ■



HOME ENTERTAINMENT

Elizabethan music

Free Byrd

William Byrd was a favourite composer of Elizabeth I—despite his Catholicism

IN 1586 A secret house party welcomed agents of a hostile power to England. Henry Garnet and Robert Southwell, two Jesuit priests, had travelled from Rome to support local Catholics and, they hoped, hasten the return of the true faith to a land ruled by the Protestant heretic Elizabeth I. Both would be gruesomely executed, Southwell in 1595, Garnet in 1606.

Their chief entertainer during that clandestine celebration was William Byrd: not only the finest English composer of his time but a staunch Catholic who stayed alive, prosperous and admired as cell, rack and noose menaced his co-religionists. One of several cases brought against him for “recusancy”—ie, refusal to attend Church of England services—ended in 1592 with a terse note: “Let the trial cease by order of the Queen.”

He died 400 years ago, aged around 83, in 1623. Much is known about Byrd’s life. This prodigiously gifted son of a well-off family made a big noise from an early age. After a spell as organist-choirmaster at Lincoln Cathedral he joined the Chapel Royal as a salaried court musician. By 1575 Elizabeth I had granted him and his older colleague, Thomas Tallis, a joint 21-year monopoly in music publishing. Byrd produced more than 500 pieces, ranging from ravishing church music set to texts in Latin (for private Catholic rites) and English (for Anglican services), to scores of songs and keyboard works.

His modern biographer, Kerry McCarthy, notes that Byrd figured as one of the Catholic “usual suspects”: often in the frame for a house search or a fine when trouble brewed. Fame, and prowess, protected him from worse. The Archbishop of Canterbury, Richard Bancroft, even gave approval to the “Gradualia” of 1605-07, a magnificent musical calendar of the traditional Catholic year.

Byrd’s Catholic choral music bridges an English tradition of florid polyphony and the emerging aesthetics of the European Counter-Reformation. The Anglican “Great Service” superbly embellishes the liturgy of a church he deemed heretical. His songs command every style of his age, from folksy to soulful. Byrd’s spectacular keyboard writing—notably in “My Lady Nevell’s Book”—dazzles and delights.

A spate of recordings will mark the 400th anniversary of Byrd’s death. A new compilation album by Stile Antico, a vocal ensemble, spans the spectrum of his choral styles. The Sixteen, a choir, has recorded Byrd’s exhilarating songbook of 1611, “Psalmes, Songs and Sonnets”, accompanied by Fretwork, a viol consort. Kit Armstrong, a young American soloist, flamboyantly plays pieces by Byrd and his Elizabethan contemporary, John Bull, on a modern piano.

British concert halls, churches and cathedrals have also scheduled tributes to this many-sided talent, from a 24-hour “Byrd-a-thon” in Oxford to Westminster Cathedral’s commitment to perform all 109 pieces in the “Gradualia”. What Byrd called his “natural inclination and love to the art of music” sustained him through hard times and mortal dangers. This year, it will win fresh converts. ■

Psychological fiction

Women beware women

My Nemesis. By Charmaine Craig. *Grove Atlantic; 208 pages; $26 and £12.99*

A SUCCESSFUL MEMOIRIST who writes books about Albert Camus and the "absurdities of middle age", Tessa has a crush on a new friend, a philosophy professor named Charlie. Both are married, but there is a charge to their long, wine-soaked, moonlit chats whenever one visits the other, either in Los Angeles or New York. For reasons both self-serving and ostensibly feminist, Tessa takes a dim view of Charlie's wife, Wah, who is somehow too sincere, too feminine, too subservient and wears "too floral" dresses. "I had the impression…that I could crush her if I so much as reached out too quickly," Tessa observes. "It wasn't right for a woman to be so fragile."

"My Nemesis", Charmaine Craig's taut, bristling and psychologically profound third novel, is the story of a seductive friendship that threatens to upend two homes. But it is really about the unwieldy needs and desires of middle age, "with death looming on one side, disappointment on the other, and nothing but a Sisyphean wheel of activities supporting the structure of one's present". It is also about the selfish demands of creativity, "the shocks and shames of parenthood", the sacrifices made by women and how love can arise from an error of perception.

Tessa is a fascinating solipsist who misunderstands herself, a feminist who holds other women in contempt, and an intellectual aggressor who likes to leave opponents bloodied. "There are times when I can't distinguish my habit of honesty from brutality," she concedes. Through Charlie, she experiences the invigoration of desire, which can seem unbearably enticing when life feels short and the days all somehow run together.

All this is a departure for Ms Craig. Her previous novels were lavishly detailed historical epics; "Miss Burma" (published in 2017) was longlisted for the National Book Award and the Women's Prize for Fiction. Slimmer, punchier and more tightly wound, "My Nemesis" highlights her talent for capturing the minutiae of interpersonal drama. She dilates each moment, noticing, for example, the way Tessa's adult daughter's shoulders stiffen "under the reproachful tension of her delicate neck" during a fraught lunch with her mother.

Associating femininity with weakness, Tessa is repulsed by Charlie's wistful description of Wah as "soft, feminine". Yet she senses that there is something cruel and petulant about her own efforts to curdle Charlie's perception of his wife. She recalls a time as a child when a neighbourhood friend asked for help stoning a crow. "It fluttered in a harrowing circle on the ground, calling to us, to anyone, for help," Tessa remembers. Yet "the more helpless that crow had become, the worthier of death it had appeared to be."

Business and capitalism

Propaganda Inc

The Big Myth. By Naomi Oreskes and Erik Conway. *Bloomsbury; 564 pages; $35*

"THE POWER of vested interests is vastly exaggerated", wrote John Maynard Keynes, "compared with the gradual encroachment of ideas." But what if those ideas were themselves the product of decades of subtle manipulation by shadowy puppeteers? That is the argument of "The Big Myth", a study of American attitudes to markets and government by Naomi Oreskes of Harvard and Erik Conway of the California Institute of Technology.

They begin with a richly researched account of the efforts of American businesses in the first half of the 20th century to shape public opinion on issues including child labour, utility regulation and, later, the New Deal. The campaign they sketch is closer to propaganda than mere lobbying, encompassing everything from pamphlets and radio shows to a purge of unfriendly textbooks from universities. In this way businesses advanced a vision of market fundamentalism in which any encroachment by the state was a slippery slope towards communism—and free enterprise was inseparable from the other freedoms on which America was founded.

In the end, though, child labour was outlawed, utilities were regulated and the New Deal reshaped America's economy—suggesting that the bid to convert America to market fundamentalism was by the middle of the century looking like a flop. Greater intellectual credibility was needed, so businesses helped bankroll Friedrich Hayek and bring out "The Road to Serfdom", his denunciation of collectivism and central planning. Moral sway was needed, so they collaborated with conservative pastors to persuade American evangelicals that Christianity and capitalism went hand-in-hand. Cultural clout was needed, too, so businesses strove to bring flattering portrayals of industry to cinema and television.

The result, the authors argue, was a society primed for the Reagan revolution of the 1980s. After that, the book shifts into a critique of the past four decades of free-market economic policy, with particular attention to financial and environmental deregulation, the loosening of antitrust enforcement and free trade. Readers familiar with the debates on these issues will find all this less original than the preceding chapters and occasionally one-sided.

▸▸

Ms Oreskes and Mr Conway prescribe increased "governance" of markets, with few details as to what that means.

Nonetheless, they succeed in chronicling a concerted effort by American business to shift public opinion in favour of free markets. The question remains, though: has it worked? The authors may be right that business helped usher in the golden age of Reaganite economics. Yet America Inc has not exactly secured the people's love.

Just 14% of Americans say they have "a great deal" or "quite a lot" of confidence in big business, down from 34% in 1975, according to data from Gallup, a polling firm. That puts it ahead of Congress (7%) but behind the presidency (23%). (Small business enjoys a more favourable 68% of Americans' confidence.) From the offbeat comedy "Office Space" in 1999, to Lord Business in "The Lego Movie" of 2014, American films have continued to portray greedy corporations as villains.

Meanwhile a survey released in 2020 by Edelman, a research firm, found that 47% of Americans felt "capitalism as it exists today does more harm than good in the world", hardly a resounding endorsement. These days American voters under 40 are about as likely to report a positive view of socialism as they are of capitalism, according to Gallup.

Sensing the shifting mood, business has changed its tune. The Business Roundtable, an eminent lobby group—and a one-time champion of the view that a company's only obligation was to its shareholders—stated to much fanfare in 2019 that firms should also look out for their customers, employees, suppliers and communities. On a jaundiced reading, that is simply a new take on an old argument: trust in business and all will be well. ■

A man they could do business with

NI UNA MÁS
NO MÁS
FEMINICIDIOS

Femicide in Mexico

Machismo and murder

An author reconstructs the life of her murdered sister

Liliana's Invincible Summer. By Cristina Rivera Garza. *Hogarth; 320 pages; $28. Bloomsbury Circus; £17.99*

In the early hours of July 16th 1990 Liliana Rivera Garza, a 20-year-old architecture student, was murdered in her flat in Mexico City by her on-off boyfriend Ángel González Ramos. He fled and has never been found. Three decades later—or, to be specific, because the specifics matter, 29 years, three months and two days later—her sister, Cristina, arrived from her adopted home in Houston to do justice in her own way: by writing about Liliana's life.

In 2019, when the author returned to the country of her birth, Mexico had become more cognisant of femicide as a phenomenon than it had been in the past. In 2012 the government made murdering a woman because of her gender a specific crime in the federal criminal code. Women's-rights groups regularly campaign on the topic, plastering murdered women's names over street signs. Off paper, though, too little has changed.

Women across the world are killed at shocking rates by men, usually partners or former ones. But Mexico's violence stands out. Women there are murdered at more than twice the rate of those in the United States. The level of impunity is grotesque. In 2017 less than 10% of reported murders were resolved in Mexico, compared with over 60% in the United States. Victim-blaming is strong. "If she had waited for marriage to have sex," people whisper of Liliana. "If she had not had an abortion..."

Anger at this lack of accountability seethes through Ms Rivera Garza's book. Her main goal, however, is not an abstract analysis of femicide but to chronicle a life lost to it. She does so movingly.

Liliana is a good subject. She was a talented writer—it runs in the family—leaving an ample archive of notebooks, lists of songs she had listened to, letters sent and unsent and correspondence from friends, often plastered in Hello Kitty stickers. The ▸▸

Sign up to Plot Twist

Plot Twist, our new culture newsletter, offers insights from our reporting and tips on books, TV shows and more. Subscribers can sign up at **economist.com/newsletters/plot-twist**

book weaves these together with police reports, news articles and excerpts of interviews with friends and colleagues.

Ms Rivera Garza’s own writing is absorbing and poetic, only infrequently becoming overwrought. She vividly portrays the talented, adventurous student and her life in the metropolis. Liliana was vibrant and freethinking. She was loyal and direct. She thought deeply about love and relationships and how they shaded into possession. She was “always speaking to us as though she were coming from a place we were only about to set off to,” says a friend.

Too often those who suffer abuse are considered weak, another facet of the blaming and shaming of victims. Nobody thought that of Liliana. Yet despite her circle of confidants, she kept to herself the grip her sometime boyfriend had on her, along with his possessiveness, jealousy and violence. There were signs, yes, but for the most part no one, not even she, would have imagined he might kill her. That is not unusual. Ms Rivera Garza refers frequently to “No Visible Bruises” by Rachel Louise Snyder, a meticulous study of the often-overlooked risk factors for women being killed by current or former partners.

The book shows powerfully that Liliana’s murder was a tragic waste of life. The reader wants more of her, for her story to continue; but that would have required that she carried on living. Instead the end is given over to the two sisters’ parents. “Liliana lay crosswise in my uterus,” their mother recalls. “I have always believed in freedom because only in freedom can we know what we are made of,” says their clear-eyed father. “Freedom is not the problem. Men are the problem—violent, arrogant, murderous men.” ■

Johnson By any other name

When stigma is the problem, using different words for things may not always help

THE ASSOCIATED PRESS (AP) style book’s Twitter feed is not often a source of hilarity. But the wire service recently tweeted: “We recommend avoiding general and often dehumanising ‘the’ labels such as the poor, the mentally ill, the French, the disabled, the college-educated.” After the tweet went viral, the AP deleted it and apologised for dehumanising “the French”.

Despite the mockery, the AP advice has solid reasoning behind it: that of “people-centred” language. English (like many other languages) allows the use of an adjective as a noun: the good, the bad, the ugly. But in contrast to some other languages, it is increasingly considered essentialising to refer to “the poor” or “the disabled”, as though they are nothing else. This especially applies to characteristics that might be considered unfortunate. The AP did not apologise to “the college-educated” as it did to the French, but it did not need to; nobody really minds being lumped in either group. The issue is essentialising combined with stigma.

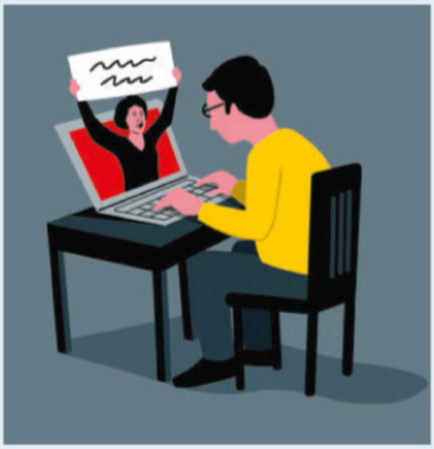
Some people are also troubled by bare group nouns such as “blacks”, “gays” and “Jews”, though these too seem to be on the decline. Fortunately, it is not hard to add another word without clunking up your prose—either “people” or, even better, something descriptive as in “black veterans”, “gay activists” or “Jewish voters”. These make these phrases a bit more three-dimensional, like the people they point to.

These are far from the only ideas flowing into journalists’ inboxes today. Suggestions abound: replace “slaves” with “enslaved people”; “minorities” with “minoritised people” or “racialised people”; “addicts” with “drug users” or “people with a substance-abuse problem”; “obese people” with “people with obesity”; “convicts” or “inmates” with “those who are incarcerated”. And so on.

In each instance, the target is a term that is, or can be seen as, pejorative. The alternative is meant to be less so. But those who encourage these lexical replacements face several problems.

One is that though a case can be made for each individual change, adopting every one will quickly make a piece of writing lumbering, since every new option is longer than the one it is supposed to replace. It will also make prose seem more unnatural, since the entire point is to replace words in common use with phrases that are not. Good journalism is ideally conversational and accessible, calling for a brisk and compelling style.

Changing the world is hard; changing the language is a lot easier, which is why linguistic engineering can tempt people who may feel they have no other tools at hand apart from their keyboards. But it does not seem to work out as hoped. Replacing a stigmatised word often merely results in the stigma attaching to the new word. “Retarded” was once a polite way of saying “feeble-minded”; it was in long-standing clinical use before becoming a playground insult and, ultimately, deeply offensive. “Special needs” came next, but now “special” is a mean-spirited taunt too.



In the same vein “handicapped” was a kinder replacement for “crippled”, and “homeless” for “vagrant”. Now “handicapped” is out and “disabled” is in (or, better yet, “person with a disability”). “Unhoused” is gaining ground over “homeless”. This “euphemism treadmill” has been observed since at least the 1970s. Nevertheless, people still hope to remake the world through language.

Some groups have taken another tack, and reclaimed older terms. “African-American” had a 30-year heyday, but now “black” is back, and even given a capital B by many. Though “hearing-impaired” is still in medical parlance, many “Deaf” people proudly refer to themselves as such, also with a capital D. Other activists have decided there is nothing wrong with being “fat”, and have wholeheartedly embraced the term. As with reclaiming slurs, the idea seems to be that showing pride is likely to be more effective than swapping words.

As for writers, good work should humanise whatever it is about, which is why stories often begin with a named person before going into causation and abstraction. If such writing is sharply as well as humanely done, it will be compelling to readers, and may even be of benefit to its subjects. To that end, the language of everyday conversation is likely to be at least as useful as the latest terminology recommended by activists. People-centred writing is indeed a good thing—but there is more than one way of putting people at its heart.

Economic & financial indicators

Economic data

	Gross domestic product				Consumer prices			Unemployment rate		Current-account balance	Budget balance	Interest rates			Currency units	
	% change on year ago				% change on year ago			%		% of GDP, 2022†	% of GDP, 2022†	10-yr gov't bonds latest,%		change on year ago, bp	per $ Feb 15th	% change on year ago
	latest		quarter*	2022†	latest		2022†									
United States	1.0	Q4	2.9	2.1	6.4	Jan	8.0	3.4	Jan	-3.4	-5.5	3.8		176	-	
China	2.9	Q4	nil	3.0	2.1	Jan	1.9	5.5	Dec‡§	2.2	-5.3	2.7	§§	20.0	6.85	-7.3
Japan	0.6	Q4	0.6	1.4	4.0	Dec	2.5	2.5	Dec	1.4	-6.1	nil		-8.0	134	-13.8
Britain	0.4	Q4	0.1	4.0	10.1	Jan	7.9	3.7	Nov††	-3.0	-5.3	3.5		193	0.83	-10.8
Canada	3.9	Q3	2.9	3.4	6.3	Dec	6.8	5.0	Jan	-0.6	-2.3	3.3		129	1.34	-4.5
Euro area	1.9	Q4	0.4	3.4	8.5	Jan	8.4	6.6	Dec	0.9	-3.9	2.5		216	0.94	-6.4
Austria	1.7	Q3	-3.3‡	4.9	11.1	Jan	8.6	5.0	Dec	-0.5	-3.6	3.1		244	0.94	-6.4
Belgium	1.9	Q3	0.8	2.9	8.0	Jan	10.3	5.5	Dec	-2.8	-4.9	3.0		228	0.94	-6.4
France	0.5	Q4	0.5	2.6	6.0	Jan	5.9	7.1	Dec	-1.9	-5.1	2.8		206	0.94	-6.4
Germany	1.1	Q4	-1.0	1.9	9.2	Jan	8.7	2.9	Dec	3.9	-2.4	2.5		216	0.94	-6.4
Greece	2.1	Q3	-2.1	5.0	7.0	Jan	9.3	11.6	Dec	-5.8	-4.5	4.3		155	0.94	-6.4
Italy	1.7	Q4	-0.5	3.9	10.1	Jan	8.7	7.8	Dec	-0.6	-5.4	4.3		236	0.94	-6.4
Netherlands	3.0	Q4	2.5	4.3	7.6	Jan	11.6	3.5	Dec	6.5	-1.5	2.8		227	0.94	-6.4
Spain	2.7	Q4	0.9	5.5	5.9	Jan	8.3	13.1	Dec	0.5	-4.6	3.3		209	0.94	-6.4
Czech Republic	1.6	Q3	-1.2	2.5	17.5	Jan	15.1	2.2	Dec‡	-1.8	-4.7	4.8		171	22.1	-3.0
Denmark	3.2	Q3	4.5	3.0	7.7	Jan	7.7	2.7	Dec	9.4	1.5	2.7		204	6.98	-6.2
Norway	1.3	Q4	0.8	3.5	7.0	Jan	6.4	3.2	Nov‡‡	18.8	12.2	1.4		76.0	10.2	-12.9
Poland	4.5	Q3	-9.3	4.9	17.2	Jan	14.4	5.2	Dec§	-3.4	-3.7	6.2		222	4.46	-11.2
Russia	-3.7	Q3	na	-2.3	11.8	Jan	13.2	3.7	Dec§	12.3	-1.1	10.8		109	74.6	1.4
Sweden	0.6	Q4	-2.4	2.9	12.3	Dec	7.7	6.9	Dec§	3.8	-0.5	2.5		183	10.4	-10.9
Switzerland	0.5	Q3	1.0	2.0	3.3	Jan	2.8	1.9	Jan	7.0	-1.0	1.4		105	0.93	nil
Turkey	3.9	Q3	-0.5	5.1	57.7	Jan	72.4	10.4	Dec§	-6.1	-1.0	10.9		-988	18.9	-27.7
Australia	5.9	Q3	2.6	3.5	7.8	Q4	6.4	3.7	Jan	2.1	-1.9	3.7		156	1.45	-3.5
Hong Kong	-4.5	Q3	-10.0	-3.5	2.0	Dec	1.9	3.5	Dec‡‡	5.5	-3.5	3.7		190	7.85	-0.6
India	6.3	Q3	19.3	6.9	6.5	Jan	6.7	7.1	Jan	-2.9	-6.4	7.3		68.0	82.8	-9.0
Indonesia	5.0	Q4	na	5.1	5.3	Jan	4.2	5.9	Q3§	1.0	-2.4	6.8		26.0	15,204	-5.9
Malaysia	7.0	Q4	na	7.3	3.8	Dec	3.4	3.6	Dec§	2.4	-5.3	3.9		21.0	4.39	-4.6
Pakistan	6.2	2022**	na	6.2	27.6	Jan	19.9	6.3	2021	-3.2	-7.8	14.8	†††	393	265	-33.8
Philippines	7.2	Q4	10.0	7.6	8.7	Jan	5.6	4.5	Q4§	-4.1	-7.7	6.3		103	55.2	-6.9
Singapore	2.1	Q4	0.3	3.8	6.5	Dec	6.1	2.0	Q4	19.6	-1.0	3.2		123	1.34	0.8
South Korea	1.3	Q4	-1.5	2.6	5.2	Jan	5.1	3.6	Jan§	1.6	-3.4	3.5		75.0	1,282	-6.4
Taiwan	-0.9	Q4	-4.3	2.4	3.0	Jan	2.9	3.6	Dec	12.7	-1.4	1.2		49.0	30.3	-8.0
Thailand	4.5	Q3	5.0	3.2	5.0	Jan	6.1	1.2	Nov§	-3.3	-2.7	2.8		70.0	34.3	-5.7
Argentina	5.9	Q3	7.0	5.7	98.8	Jan	72.4	7.1	Q3§	-0.7	-3.8	na		na	192	-44.7
Brazil	3.6	Q3	1.6	2.8	5.8	Jan	9.3	8.1	Nov§‡‡	-2.9	-4.7	13.4		208	5.23	-1.1
Chile	0.3	Q3	-4.6	2.8	12.3	Jan	11.6	7.9	Dec§‡‡	-8.0	1.1	5.8		-24.0	797	0.7
Colombia	2.9	Q4	2.7	7.6	13.3	Jan	10.2	10.3	Dec§	-5.7	-5.0	12.3		320	4,909	-19.5
Mexico	3.5	Q4	1.6	3.1	7.9	Jan	7.9	3.0	Dec	-1.4	-2.5	9.0		115	18.6	9.3
Peru	1.7	Q3	1.8	2.6	8.7	Jan	7.9	8.8	Jan§	-4.8	-1.5	7.8		167	3.87	-1.6
Egypt	4.4	Q3	na	6.6	25.9	Jan	13.9	7.2	Q4§	-4.6	-7.4	na		na	30.6	-48.6
Israel	7.5	Q3	1.9	6.1	5.4	Jan	4.4	4.2	Dec	3.5	0.5	3.5		178	3.53	-8.8
Saudi Arabia	8.7	2022	na	8.9	3.4	Jan	2.5	5.8	Q3	12.6	3.3	na		na	3.75	nil
South Africa	4.1	Q3	6.6	2.3	7.2	Jan	7.0	32.9	Q3§	-1.4	-5.5	10.0		78.0	18.1	-16.3

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds.

Markets

In local currency	Index Feb 15th	% change on: one week	% change on: Dec 31st 2021
United States S&P 500	4,147.6	0.7	-13.0
United States NAScomp	12,070.6	1.3	-22.8
China Shanghai Comp	3,280.5	1.5	-9.9
China Shenzhen Comp	2,187.5	2.2	-13.5
Japan Nikkei 225	27,501.9	-0.4	-4.5
Japan Topix	1,987.7	0.2	-0.2
Britain FTSE 100	7,997.8	1.4	8.3
Canada S&P TSX	20,720.4	0.2	-2.4
Euro area EURO STOXX 50	4,280.0	1.7	-0.4
France CAC 40	7,300.9	2.5	2.1
Germany DAX*	15,506.3	0.6	-2.4
Italy FTSE/MIB	27,533.7	1.4	0.7
Netherlands AEX	769.7	2.9	-3.5
Spain IBEX 35	9,294.8	0.7	6.7
Poland WIG	60,584.8	-0.6	-12.6
Russia RTS, $ terms	914.9	-6.8	-42.7
Switzerland SMI	11,272.7	nil	-12.4
Turkey BIST	4,950.5	9.9	166.5
Australia All Ord.	7,559.1	-2.3	-2.8
Hong Kong Hang Seng	20,812.2	-2.2	-11.1
India BSE	61,275.1	1.0	5.2
Indonesia IDX	6,914.5	-0.4	5.1
Malaysia KLSE	1,488.2	1.2	-5.1

	index Feb 15th	% change on: one week	% change on: Dec 31st 2021
Pakistan KSE	41,326.9	-1.0	-7.3
Singapore STI	3,280.8	-3.2	5.0
South Korea KOSPI	2,427.9	-2.2	-18.5
Taiwan TWI	15,432.9	-1.2	-15.3
Thailand SET	1,647.4	-1.4	-0.6
Argentina MERV	254,969.8	1.9	205.4
Brazil BVSP*	109,600.1	-0.3	4.6
Mexico IPC	53,422.2	0.6	0.3
Egypt EGX 30	17,522.6	3.4	47.1
Israel TA-125	1,839.4	0.2	-11.3
Saudi Arabia Tadawul	10,573.1	0.6	-6.7
South Africa JSE AS	79,471.8	-0.6	7.8
World, dev'd MSCI	2,815.5	0.5	-12.9
Emerging markets MSCI	1,004.9	-1.5	-18.4

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2021
Investment grade	145	120
High-yield	451	332

Sources: Refinitiv Datastream; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

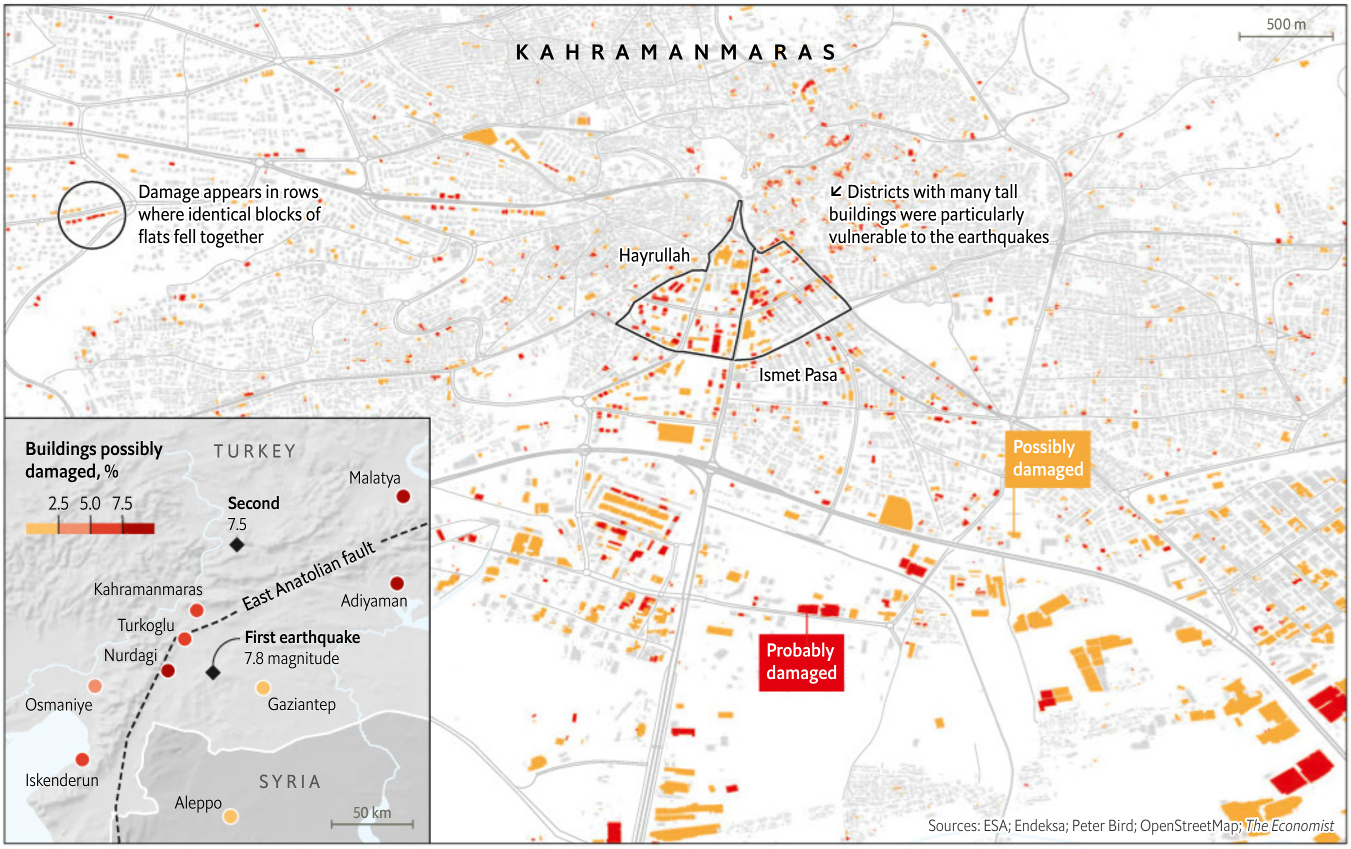
The Economist commodity-price index

2015=100	Feb 7th	Feb 14th*	% change on month	% change on year
Dollar Index				
All Items	158.9	158.7	0.6	-10.3
Food	142.2	144.4	3.5	-3.7
Industrials				
All	174.4	171.9	-1.6	-14.8
Non-food agriculturals	130.4	126.8	-3.2	-29.8
Metals	187.5	185.4	-1.3	-11.0
Sterling Index				
All items	201.9	199.2	1.6	-0.2
Euro Index				
All items	164.8	164.2	1.4	-4.9
Gold				
$ per oz	1,875.2	1,850.2	-3.2	0.1
Brent				
$ per barrel	83.9	85.7	-0.5	-8.3

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit
economist.com/economic-and-financial-indicators

→ In Kahramanmaras 5.6% of buildings showed signs of possible damage visible from space


500 m
KAHRAMANMARAS
Damage appears in rows where identical blocks of flats fell together
↙ Districts with many tall buildings were particularly vulnerable to the earthquakes
Hayrullah
Ismet Pasa
Possibly damaged
Probably damaged
Buildings possibly damaged, %
2.5 5.0 7.5
TURKEY
Malatya
Second 7.5
East Anatolian fault
Kahramanmaras
Adiyaman
Turkoglu
First earthquake 7.8 magnitude
Nurdagi
Osmaniye
Gaziantep
Iskenderun
SYRIA
Aleppo
50 km

Sources: ESA; Endeksa; Peter Bird; OpenStreetMap; *The Economist*

The rich are different

Buildings in poor areas were 3.5 times more likely to suffer damage

Victims are still being counted, but the earthquakes in Turkey on February 6th already rank as the world's deadliest natural disaster since 2010. Although any quake of such strength would inflict grave harm, flimsy houses exacerbated their impact.

The scale of destruction is still being tallied. In the meantime, satellite images can yield estimates. Across nine urban areas 5% of buildings show signs of damage visible from space. In areas with cheap housing, the shares were greater.

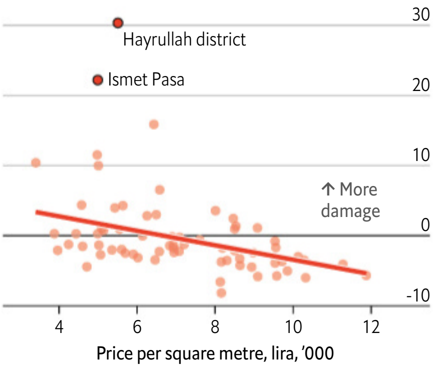
To produce this figure we used data from Sentinel-1, a satellite that flies over Turkey at least twice every 12 days. Its synthetic-aperture radar bounces microwaves off Earth and measures the echo when they return. Changes in the shape of objects on the ground alter this signal's strength.

At our request Ollie Ballinger of University College London compared images of the region taken before the disaster with ones from fly-overs on February 9th and 10th. For each pixel, he calculated the odds that the change in signal intensity from the pre-quake baseline would arise by chance.

We then combined these results with building maps from Microsoft and OpenStreetMap. We classified structures as possibly damaged if any pixels had at least a 95% chance of a true deviation from earlier images, and as probably damaged if a building's average reached 95%. The latter method closely matched the UN's damage estimates for war-torn Ukrainian cities.

Current official figures show double-digit shares of buildings damaged in some cities, more than we could detect in most places. This could result from differences in the areas examined, from buildings that were damaged irreparably without collapsing or from our high threshold for changes in signal strength. Moreover, our data on Malatya, where the possible-damage share did approach 20%, may not be reliable, since the city has had just one fly-over.

Kahramanmaras, share of buildings probably damaged compared with expected*, %



*Based on average building footprint

Nonetheless, our data cover the entire region at once, making it possible to compare damage between areas using consistent methods. Of the seven places we studied with two post-quake images, the hardest-hit was Adiyaman, a mostly Kurdish city near the fault line, with 10% possible damage and 5% probable. Gaziantep, the region's biggest city, was the least affected.

In Kahramanmaras, a city of 560,000 caught between the two epicentres, 2% of buildings showed probable damage. The impact was greatest in poor areas, presumably because pricier structures are sturdier: the share of buildings with probable damage ranged from 1.0% in the decile of districts with the most expensive homes to 3.6% in the decile with the cheapest ones.

After adjusting for buildings' footprints—damage to bigger structures is easier to spot—a 10% increase in average property prices was associated with a 0.8-percentage-point decline in the probable-damage share. Living in an earthquake-prone region with lax building codes is risky. Doing so while poor is even riskier. ■

Through a child's eyes

Maya Widmaier-Picasso, the artist's elder daughter, died on December 20th, aged 87

Two weeks after the liberation of Paris in 1944, Maya Picasso, then nine, made her way to her father's studio. Such visits were precious, because the family was complicated. Her father did not live with her and her mother, Marie-Thérèse Walter, but was still married to Olga Khokhlova. Maya and Marie-Thérèse were his secret family, though for a while they lived in a flat almost directly opposite his. Her father was also seeing a woman called Dora Maar, whom Maya did not like. She had met Dora only once, in that very studio, standing beside her father's "Guernica", with its tangled bodies and that terrified horse's head, and she had begun to cry. Her father painted the two women fighting over him, black and white doves in a cage. He was happy, even delighted, with the way things were. Maya minded more; but she also knew she was his *boquerona*, his "little anchovy", the joy of his life.

In most weeks they saw each other. He would collect her from school and they would walk along the Seine, picking up pebbles that he made into little dolls. (He also made her characters of cloth or paper, with chickpea heads, and origami birds from exhibition invitations.) He took her to cafés to hear jazz bands. The greatest fun, though, was to go to his studio and watch him paint. Almost no one else was allowed to. But there she would sit for hours as he approached the canvas like a dancer, on tiptoe, applied the brush (the inevitable cigarette jammed in his mouth), then danced away again to judge from a distance what he needed to do next. On that first visit after the liberation they sat and painted together, and he hung their pictures up to dry on the studio clothesline: Maya's, Picasso's, daughter's, father's, as if their value was equal.

From her father she learned what it meant to live, all the time, with the urge to create. It was sometimes exasperating. At supper he would suddenly tell her not to move or change her expression, and would dash off to find paper, pencil, notebook, anything to catch that pose and look. Those seconds, while he caught them, seemed to last for ever. He drew her once with a napkin round her neck and sent the picture to an exhibition. She blushed to think what people would say. At times she dared not admit her father's strange occupation, and said he was a housepainter.

But it was faces that intrigued him. First her mother's, cool, pale and beautiful, seen one day in 1927 outside a Metro station; then her own chubby baby one. She too was his muse, drawn or painted more than any of his other children and as much as any of his mistresses. On the snowy day when she took her first steps he drew her in tender pastel, and kept the little pink boots she was wearing for the rest of his life. He sketched her in a woolly hat, with a cloth doll in her hair, or sitting moodily at a table. In any of these drawings she could recognise herself. In his paintings, though, her limbs atrophied, or stuck out at odd angles. Her eyes slid down her face, her plaits stiffened and her skin acquired strange colours. She held up a green net, and gaped with all her teeth when a red butterfly flew into it. The name "Picasso" was on her sailor's hat, as though her father owned her. And in a way he did. Apart from her mother's blonde hair and blue eyes, she looked extraordinarily like him. Picasso was also painting himself in this small disjointed figure, sitting solemnly with her toys.

Their relationship, though, was not one-way. Maya's arrival in 1935 had suddenly revived him, after a lull of years. Her official name, María de la Concepción, was his idea, after a sister who had died when he was 14. She replaced that loss, and when she stopped moving after her birth he splashed water on her, urgently, to shock and baptise her. As she grew, and especially as she began to draw, he watched her keenly, teaching her but also learning how to see with a child's eyes. He made her colouring books, and filled sketchbooks with his work alongside hers as they sat together in the kitchen, the only warm place in the flat. It had taken him four years, he said, to paint like Raphael; it would take a lifetime to paint like a child.

She was not only his inspiration but also, increasingly, his guardian spirit. Picasso kept everything he could as a protective cloak around him: every scrap of paper, every object, even the dust that fell on his paintings and on the studio floor. The strongest cloak was her and her mother's enduring love for him, despite his betrayals. He presented Maya with his nail- and hair-clippings, to prevent them being used as spells against him; he died intestate, being terrified of confronting death and knowing, trusting, that she would sort out everything.

He believed this despite the fact that, as the years passed, they had drifted apart. He last drew her just before her 18th birthday. Afterwards she went to study in Spain, and worked as an assistant to the singer Josephine Baker; after her marriage in 1960, to a naval captain, she and her father did not speak again. As a way to emerge from the stifling fame of Picasso, she began to emphasise the Ruiz side, his father's side, of the family, and gave her three children Ruiz-Picasso as a surname. Yet when Picasso died in 1973, leaving both an unallocated fortune and around 45,000 works to be catalogued, authenticated, licensed, prudently donated and defended, she naturally took charge. A seven-year legal battle secured her inheritance, with those of Picasso's two other illegitimate children. With her half-brother Claude, however, she increasingly clashed over authentication, until in 2012 he set up the Picasso Administration to do the job, and she was moved aside.

She was appalled when that happened. Although her daughter Diana, an art historian and curator, constantly supported her, to be superseded was painful. Her arguments came from the heart. She was the one who knew instinctively whether or not a work was Picasso's, not least because she had spent those childhood hours doing art beside him. She was also the only person who truly understood how the sensual curves of his still lifes were those of her mother's body, and how "Le Rêve", the painting she loved best, her mother dreaming of Picasso in a red armchair, was a portrait of the love that had created her, who had in turn recreated him. ■

Subscriber-only live digital event

Ukraine at war: one year on

STOP PUTIN
HONGKONGERS STAND WITH UKRAINE
HONGKONGERS STAND WITH UKRAINE

Friday February 24th
4pm GMT / 11am EST / 8am PST

Twelve months after Russia's invasion of Ukraine, both countries are paying a high price. Join our editors for an in-depth discussion about the state of the conflict and risks of escalation. Topics covered will include tactics on the battlefield, the prospects for peace talks, the interests of China and NATO, and what might lie ahead in 2023.

There will be the opportunity to ask questions throughout the session.

Zanny Minton Beddoes
Editor-in-chief

Edward Carr
Deputy editor

Arkady Ostrovsky
Russia editor

Shashank Joshi
Defence editor

Reserve your space:
economist.com/ukrainewebinar

The Economist

"I HUMBLY SEARCH FOR
THE TRUE, THE GOOD,
THE BEAUTIFUL."

YIQING YIN,
HAUTE COUTURE CREATOR, WEARS THE
VACHERON CONSTANTIN TRADITIONNELLE.

VACHERON CONSTANTIN
GENÈVE

ONE OF
NOT MANY.